Ships AND SHIP MODELS

TWO SHILLINGS
JULY 1954

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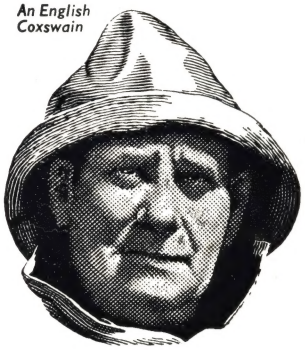

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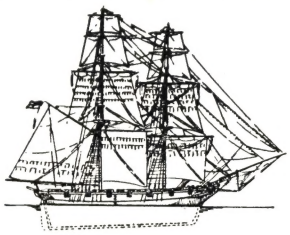

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Ships AND SHIP MODELS

INCORPORATING MODEL SHIPS & POWER BOATS

Vol. VII. No. 79. JULY 1954

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THE SHIP'S LOG

THE "MODEL ENGINEER" EXHIBITION

We make no apology for reminding our readers of the "M.E." annual exhibition which opens at the new Horticultural Hall, Vincent Square, S.W.1., on Wednesday, August 18th, and continues until Saturday the 28th. Many of the new readers of our magazine in its enlarged form might be interested in visiting the exhibition as, whether they build models or not, there is always something about a good ship model which appeals to lovers of the sea. As for those of our readers who are competitors we cannot stress too strongly the advisability of having the model finished some little time before the date for sending it in. The last date for sending in entry forms is Monday, July 12th. In view of the large number of ship models entered for competition and of many types represented we have added yet another to the panel of judges for this section. The new member is Mr. J. H. Benson of Sidcup, Kent, hon. secretary of the Model Power Boat Association. Mr. Benson has had a wide experience of building and operating model steamers and hydroplanes, which will be extremely valuable in judging the models. Under the new arrangement, Mr. Benson and Mr. Trollope will be concerned chiefly with models of power driven ships, while Lieut. Commander Craine and Mr. Hampshire will be able to concentrate on sailing ships.

RADIO CONTROL LICENCES

Model makers who are interested in the radio control of their models have been somewhat perturbed by the new regulations under which they have had to take out licences before they can operate their models in this manner, as announced in our last issue. In Mr. Sommerhoff's notes in this issue he has something to say on the subject, and we are gratified to find that in finalizing the regulations the various societies concerned are being consulted, and that the authorities are sympathetic and co-operative. None of the radio regattas already organised need be affected, and existing equipment will need little or no modification.

HARVEY A. ADAM

We regret to announce the death of Harvey A. Adam who passed away early in March in Kenya. Many of us have read and enjoyed his fine book on "Model Boat Construction" and still more remember him for the exceptionally good constructional kits which he produced shortly after the war. Especially popular was his kit for a planked model of a sailing dinghy with centreboard, and all his kits were examples of what model boat kits should be. He was, moreover, an enthusiastic builder of model power boats of all types, and when, a few years ago, he decided to take up a new career in Kenya he was greatly missed both in the Lymington area where he lived and throughout the country wherever his book and his kits were known.

OUR COVER PICTURE

Nobody can fail to recognise the subject of our cover picture this month, as both the P.S. *Royal Eagle* and the Tower Bridge are known to everybody. To Londoners and visitors to London the picture will recall happy memories of sunny days spent on the river.

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Algy Willoughby—

THIS story concerns a light-hearted shipmaster whose name was not Algy Willoughby-Wilson, but should have been. I say so because it would have fitted him much better than the name that appeared on the ship's registers of the steamers he commanded. I should know for I served under him. He was of medium build, had a handsome, weather-beaten face, and a good head of dark brown, wavy hair.

I joined his ship at Newport, in the Bristol Channel, during the first world war. She was a steamer of about 3,000 tons gross, chartered by the Admiralty to carry shells from Canada to ports in Northern France. The *Basuda* had not been built for voyages in winter, North Atlantic. I remember on one occasion in Halifax, Nova Scotia when the steam heaters had frozen up in our cabins, and we complained to the chief engineer, he replied, " What do you expect ? They were designed for cold nights in Calcutta ! "

Bound across the Atlantic to the westward our passage in ballast was not exactly a pleasure cruise ; but when loaded down to her marks with shells primed, capped, and fused it was less enviable. There were no convoys then, and we were not defensively armed. One hit by a torpedo or a shell in the holds and we would have been blown sky-high. How vulnerable we were was brought home to us when two ships, engaged on the same hazardous voyages, collided in Halifax harbour. They blew themselves to pieces and most of the town as well. Outside an earthquake, no town had suffered such casualties. At least we knew what to expect.

We called at Newport for bunkers and any repairs or overhauls that might be necessary. We looked upon it as our home port. The local music hall was one of the centres of attraction there. In spite of the adage that " oil and water never mix " the deck and engineer officers usually spent their evenings out together. We were approaching the local music hall one evening when we saw Algy and a girl friend making for the booking office. Having found that he had booked two seats in the orchestra stalls, we booked ours in the dress circle.

It was a critical audience, and things had not gone too well for the artists when a vivacious young thing described on the programme as a French danseuse—vocalist, came on the stage. Whether she was French or not, didn't matter ; she had the right figure, which her clothes, or the lack of them, showed off well enough to please the admiring mariners in the dress circle. And to add to this disturbing influence she sang in a mixture of broken English and French. The song wasn't hard to follow, and the chorus ended with an invitation—obviously

Wilson

THIS MONTH'S SHORT TRUE STORY
OF A CARE-FREE SHIP MASTER

BY CAPTAIN A. G. COURSE

to the male section of the audience—" to coom and dance avec moi." Unfortunately this phoney inivtation appreared to be made to our captain who was sitting at the end of the third row of the stalls in the centre aisle.

At the end of each chorus Algy jumped up and was promptly hauled back by his companion. But at the last chorus he made a break-away, and, vaulting over the rail into the orchestra pit, climbed up on to the stage. There, grabbing the amazed and somewhat scared dancer, he waltzed her round to the music of an inspired orchestra, while an enthusiastic audience, led by a section of the dress circle, brought the house down with applause. After that every turn was a success.

Next day the *Basuda* sailed for Canada. Four days submarines, four days gales and four days fog was the accepted order of the passage. It was on the return passage, with the old " tub " loaded with high explosive shells, that Algy's courage and seamanship came to the fore. We were only about fifty miles off the Scilly Isles, when at one o'clock in the afternoon, the second mate reported a lifeboat, with her lug sail set, on the starboard beam. His first thought was to alter course towards it to rescue the torpedoed crew. But Algy who had left his lunch in the emergency, levelled his telescope on the object, and immediately gave orders to alter course to put it astern.

" That's a new trick," he explained to the second mate. " You'll see that ' lifeboat ' overtaking us soon—it's a U-boat."

After we had sent out our SOS giving our position there was nothing more we could do, in our efforts to escape the U-boat, than increase our speed. This was usually ten knots although the old " tin kettle " had been known to reach twelve when running for a tide. Algy sent for the chief engineer. The outcome of their conversation was that the three Irishman of the " black squad " went below. Soon the old hooker was shaking the guts out of herself, for the combined efforts of those three firemen in the stokehold, and the four engineers in the engine room, had increased the speed to 14 knots.

The mate and I had joined the second mate and Algy on the bridge when " Sparks " brought up an instruction from the Admiralty. " Set course for the Scilly Islands ! " it read.

" Wonderful ! " said Algy. " At least it would be if the U-boat wasn't between us and the Scillies. Tell 'em we're steering in exactly the opposite direction, ' Sparks ' "

The U-boat didn't seem to be gaining on us now. She opened fire and we zig-zagged. With no gun to return the fire it was the best we could do. The shells fell short. Then the sub. increased her range and they began to fall to port and starboard. One went right over and it looked as if she was working the bracket system on us. Algy watched those shells and altered course accordingly. Luckily for us there was a bit of a sea running and conditions for range finding on the U-boat were bad. It was a big responsibility for our captain, and I couldn't help thinking of the two Algy's : one dancing excitedly with the pseudo

French girl on the music hall stage ; the other, calm and cool, directing the helmsman in his efforts to dodge the submarine's shells.

Two hours later we saw smoke ahead on the horizon. Two armed mine-sweeping trawlers were returning to base. When the submarine identified them she broke off the action and dived. The trawlers escorted us as far as a position off the Lizard, and then made off inshore. But that wasn't the end of our troubles. The second lot came exactly twelve hours after the first ; and this time it was a collision at one o'clock in the morning, again when the second mate was in charge of the watch.

Coming off watch at midnight I had turned in my bunk only to wake an hour later on the floor of the cabin. I made my way up to the bridge. Algy was there and he told me to try and call up a trawler or patrol boat with the signalling lamp. There was no reply. Algy in the usual calm manner he had when at sea, observed that it was like looking for a policeman ashore ; there was never one about—unless you didn't want one.

There was no sign of our deep loaded ship settling down in the water. It was very dark and our engines were stopped. The only sound was the rattling of the blocks of one of the lifeboat falls as the boat was being lowered to the water.

Steaming up Channel on a very dark night with no navigation lights, was worrying enough, but worse still was the fact that any vessels approaching would also be without lights. The second mate had seen a black mass in the water which was coming nearer ; in fact, coming straight at him. Its bearing didn't change, so he knew that a collision would occur if an alteration of course was not made. And, assuming that the black mass was another ship, he knew that he must prevent her hitting bow on. The result would mean an explosion which would blow both ships sky-high. He did his best to avoid a collision, but when he realised it was too late, he knew that *he* must do the ramming if the crews were to be saved.

Speed had been reduced considerably when our bow cut through the hull of the other ship, abreast of the break of the forecastle head. She was a coaster of about 1,000 tons and sank in a few minutes. Her crew, keeping handy under the bridge, got away on one of the rafts. All except one of the engine room crowd who was off watch and was sleeping in his bunk in the forecastle. By a miracle he was rescued.

The force of the collision had jammed together the door posts of the two forecastle doors ; so it was impossible for him to escape that way. There was a long slanting hole in the side of the forecastle but the jagged edges of the plates did not seem wide enough for him to get through. The problem was solved for him. He found himself being pushed through by air pressure ; the water pouring into the forecastle at the lower end of the hole was forcing the air out at the other. When the lifeboat picked him up out of the sea he was in a bad way, his flesh being lacerated by the jagged edges of the plates. All hands were saved and landed at Brixham at daylight.

There were times during that period of service when our ship was anchored in Stokes Bay, Portsmouth, waiting for orders. And it was during one of these periods of inactivity that our chief officer told us the story of Algy's fall from grace in the company's passenger steamers. Algy, being one of the senior chief officers in the firm, had been appointed to their latest liner. But with so many lovely ladies on board it was sure to happen.

He had disciplined himself successfully all the voyage ; right up to the time of the fancy dress dance which was held the evening before the ship arrived in London. It was the usual thing to award prizes for originality in dress, and Algy had been toying with the idea for a couple of days. Then, early one morning, when he was pacing the bridge in the four to eight watch, it came to him quite suddenly. He would be a Tower of London executioner. So, with the assistance of one of the stewardesses, some black material was turned into tights and a close fitting blouse. White ribs were painted across the blouse, and a black skull cap was adorned with a white skull and crossbones. To complete the outfit the carpenter made a large wooden axe. As things turned out there was one thing missing—he should have worn a mask.

Algy, popular with the girls as usual, danced most of the evening with the lady voted the most charming on board. It may have been intoxication caused by the proximity of the beautiful lady, or occasional visits to the bar, that brought about the irresponsible, care-free attitude that overcame Algy at times. It started when, after one of the dances, the charmer suggested that it was hot on the dance floor, and she would like some fresh air.

It was a lovely summer night in the English Channel. The stars were scintillating in a dark, velvet sky, and the sea was as calm as the night. They took a stroll along the promenade deck. Couples were leaning on the rail at the ship's side watching the sea slide past in a straight run of white and green. Among them was the man who had decided to represent William Tell's boy of apple fame. He was leaning on the rail, looking out to sea, deep in conversation with a lady friend, the apple resting temptingly on the top of his head. Algy, with his dancing partner on his arm, sublimely happy, and swinging his axe in masterly style, was passing when he spotted it. It was too much. Detaching himself from his fair companion, and motioning her to remain silent, he swung his axe in careful aim. No doubt that apple would have gone clean off into the sea, if William Tell's boy hadn't at the critical moment raised his head to see the glare of St. Catherine's Light on the horizon. He never saw that light—he slumped down to the deck, partially stunned.

Algy did some quick thinking. Pledging his girl friend to secrecy he made a hurried walk round the promenade deck and returned to the scene which had already attracted a number of the passengers. Algy pushed his way through, and, asking what had happened in as innocent voice as he could command, rendered first aid, and with assistance

carried the apple balancer down to the doctor's surgery. There was nothing wrong of a serious nature, just a lump on the back of his head. All would have passed off all right but for the apple balancer's girl friend, who thought it her duty to expose the culprit. And that was the end of Algy's passenger ship service.

He didn't let that worry him. There were plenty of girls ashore, and they were always pleased to see him. I had " swallowed the anchor," and had been appointed to a position with a Dock and Harbour Authority when I next met Algy. Coming into the lock, at two o'clock one morning, he recognised me and came ashore for a yarn. " Do you mind if I use your phone ? " he asked. I wondered who he was going to talk to at that unearthly hour in the morning. He told me. " I'd like to let Flossie know I've arrived," he said.

The second world war came and I lost touch with Algy. I knew he was at sea in command of a ship somewhere. And I knew, that in spite of his age he would still be as cool, in danger, as he was over twenty years before. Some years later I heard of what was to be one of his last episodes at sea. It was at the time of the Dunkirk evacuation and he was then in command of a big light draught vessel of about 500 feet in length. He knew of the perilous position of our soldiers, and did what was thought to be the impossible. He navigated his ship into Calais without the help of tugs or pilots, and, going alongside in spite of heavy air attacks, took on board 6,000 troops. With the same nonchalance and careless rapture, with which he treated his girl friends ashore, he took his best " girl " (his ship) into that hell and brought her out unscratched.

Algy has passed on—some say to Fiddler's Green, a place reserved for sailors and chorus girls. He enjoyed a full life on this earth, and I, for one, am proud to have served under him.

Captain A. G. Course is the author of " The Wheel's Kick and The Wind's Song."—Percival Marshall, 18s.

★ ★ ★

TOPICAL Digest

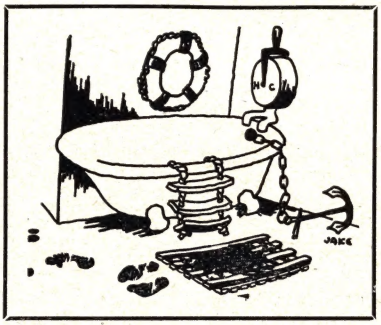
N.A.T.O.'s New Inshore Minesweeper

H.M.S. "Frettenham," a new inshore minesweeper, was recently launched at Cowes. The first completed of a group of anti-mine craft being built in the United Kingdom for N.A.T.O. nations, the " Frettenhcm " is 106 ft. 5 in. in length with a beam of 20 ft. 6 in., and is designed to operate in shallow waters.

* * *

Exhibition at the National Maritime Museum

We have visited the Exhibition of models and pictures of the Thames Spritsail Barges at the National Maritime Museum and found it of absorbing interest. One of the earliest models is that of the Gravesend Tilt Boat circa 1650. There is a beautiful model of the bowsprit barge " Kathleen " presumably made from the drawings by Edgar J. March which are available from this office. An interesting model is that of the swimhead stumpie barge " Joseph " with its short mast and the tiny mizzen set on the rudder head. In view of the recent barge race, the model of the barge " Centaur," which was built specially for racing, calls for attention.



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" Q.E." to fit Stabilisers

The 83,000 ton liner " Queen Elizabeth " is to be fitted with stabilisers during this year.

Work on the liner to fit the anti-roll fins will be carried out in two stages so as not to interfere with the heavy Atlantic bookings already made for months ahead.

Preliminary work will start in Southampton at the end of July. The Cunard company has already fitted the stabilisers to some of its smaller liners, and have found a big reduction in bills for broken crockery and glassware.

Safer Lifeboat Launching

A new method of lifeboat launching for use in small trawlers has been invented by Mr. Charles Webb of Grimsby and is being examined by the Ministry of Transport. On a recent test the time taken to launch a boat was only ten seconds—improving greatly on the present unsatisfactory and often dangerous method entailing the use of davits.

Mr. Webb's patented method consists of a platform mounted on the trawler's deck between the mizzen and stern, this carries the cradle holding the boat. The cradle can swivel through 360 degrees and the lifeboat is launched by means of a forward ramp resting on the rail. The impetus for the launching is gained by lifting the stern until the boat moves forward on rollers.

* * *

Recognition for a Ship Modeller

The model of a Severn trow made by Mr. A. E. Field, of the Birmingham Ship Model Society, and which was awarded a silver medal at the 1952 " M.E." Exhibition, has been purchased by the Bristol City Museum and may be seen in the Shipping Gallery at the Museum. Our congratulations to Mr. Field for having his model thus appreciated in what was the principal home port of that type of craft.

* * *

Midshipmen will leave the Fleet

Midshipmen will no longer serve with the Fleet after next May—ending a Royal Navy tradition which dates back to 1660. Reason : the rapid development of modern weapons.

Cadets will no longer go to sea with the Fleet until they have had a thorough technical grounding, and, will not be accepted until they are 18—instead of 16. Training will be for two years at Dartmouth on shore, and in a small squadron of ships based on the River Dart.

The training—instead of covering general education—will be devoted to naval work and specialist courses now taken at sea.

At the end of the first year cadets will be promoted to midshipmen—but this will only be a shore rank.

When they pass out of the college, they will go to sea as acting sub-lieutenants.

Gaff-rigged cruiser—Thurne mouth 1927

Sailing Craft

OF NORFOLK & SUFFOLK

PART TWO

BY F. C. TANSLEY

ARTISTS and modellers have always been attracted by the picturesque appearance of the sailing wherries in their natural environment. The slender black hulls, the high peaked sail with its fine curves and rich brown or sepia tints, and the many dashes of bright colour favoured by the wherryman, harmonise well with the windmills, and wide stretches of grey-green marshes, glittering waters, and gorgeous cloud masses in a deep blue sky, so typical of Broadland. The owners and wherryman certainly do have their colour schemes ! The hull itself is plain black by tradition but the water ways may be emerald-green or dark red, with a white edging all round the gunwale walk ; the high coamings of the hold are checkered or panelled white and black for their whole length, sometimes with a bottom line of green. The 2 ft. wide hatch covers are usually red throughout, but in the vicinity of the cabin and the smoke stack the skipper, or his wife, have fanciful schemes in bright colours, yellow, blue, vermilion, emerald, gold, combined often with carvings about the cabin windows and doors, and the rudder tiller. At the bows, there is that semi-circle of white around the stem head (also seen in Greek galleys two thousand years ago), and the white bollards, very useful on a dark night ; also there is the name-board along the fore end of the hold, and here again bright colours and opulent carving have their opportunity. The mast head is likewise gaily decorated above the hounds and here may be seen bands of colour and gilt bands round the top under the bright flag frame and ribbon. Such tokens of the light heart are good to see.

In easier times the wherrymen indulged in the pleasures of real sailing men, by racing their craft on every possible occasion even when voyaging in small groups with merchandise along the Yare to and from Yarmouth North End and Lowestoft. Oulton Broad, and Norwich. The wherries were also a principal feature of the regattas at Breydon, and even on the sea at the Lowestoft Annual Marine Regatta which was patronised by a host of yachts, fishing boats, and yawls. There was grand sailing as a rule, but it was risky for the wherries, and there were founderings in squally weather for they are not sea-going craft.

The wherry held her own well against the competition of the railways, and the carriers' carts, and it was not until the coming of motor vans on the

Racer cruisers on Oulton Broad in 1903

reclaimed roads of Broadland that the dark sails ceased to be seen on the rivers. Some of them were converted into very comfortable cruisers, (with white sails and auxiliary engines). Occasionally there has been a stirabout, and sedate and small regattas have been held for trading wherries and wherry-yachts, mixed. Last year the " Norfolk Wherry Trust " was formed to keep the tradition going by means of one large sailing wherry renovated completely in the old style, called *Albion*, and hopefully carrying sugar-beet from Norwich to the factory at Cantley on Yare River, and returning with wood to Norwich, and so on. May her financial success give this enthusiast's venture its due reward !

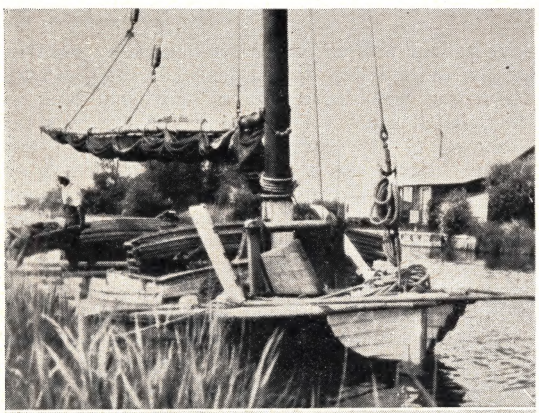
It is interesting to note that in May of last year designers at Poole, Dorset, supplied to the Crown Agents plans for a shallow working craft 45 ft. long for the Nigerian Lakes—she is of the Norfolk wherry type with the usual gaff mainsail but carries in addition a stay foresail. She is of double chine construction for simplicity of building by natives. So there is nothing quite new under the sun !

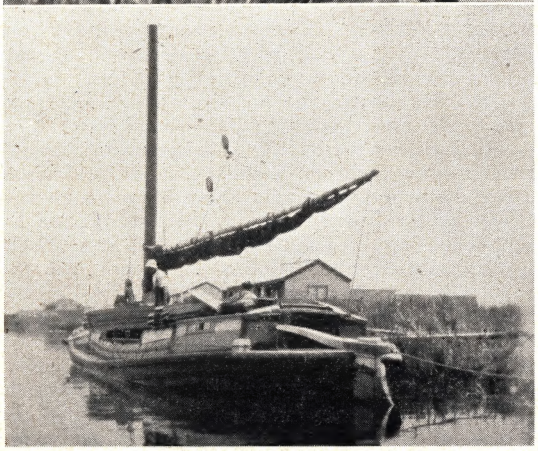
Yachting and Cruising : Sailing for pleasure on the rivers and broads has fine sporting and cultural possibilities, but it was not largely practised until 100 years ago and then mainly by the local inhabitants. In the early days, especially in the vicinity of Norwich and Yarmouth (Breydon Water) great concourses of folk of all classes, in or out of " society " gathered for what were called " Water Frolics." The famous painters of the Norwich school—Stannard, Crome, and the rest, illustrated the scenes in vast canvases. The meetings looked like floating country fairs half on land and half on water. The main object was obviously to eat, drink, and be merry and to be jolly together. The sailing craft were of all sizes and rigs, rather like small " keels " with square sails, and they were usually aground or floating about in groups, highly decorated with flags, and ladies and gentlemen in most unseamanlike garments. There were work-a-day wherries laden with provisions and beer. The sailing craft were called " pleasure boats," and their crews sought jollity.

Yacht racing and cruising as we know it came later, and has been developed to the limit. From the first the yachts followed forms of hull and sail plan well adapted for the shallow waters and narrow rivers, and gradually local sporting people began to coalesce into social clubs.

The Norfolk Lateeners : Curiously enough the first yachts were of the lateen rig. The old recorder Folkard notes that in 1850, a large number of these were on the Broads. It has been stated that this typical Mediterranean rig was introduced by an enthusiastic army officer from Malta then stationed at Norwich where the first clubs were formed. Certainly the lateen rig proved to be very suitable for the winding waterways by reason of its remarkable windward ability and handiness in manoeuvring. There were only a few of these craft left in 1895 and I was lucky to take a photo of the *Ariel* of Beccles under sail near Oulton Broad. We can see that the foremast is stepped very far forward, and that the foresail is set very flat with a boom along the bottom—this was a late innovation ; a standing lug mizzen was usual, but in the earliest stages, as old pictures show, some of the boats had two lateen sails, and both masts were raked forward like Mediterranean lateeners and Arab dhows.

The lateeners were at first classed by length alone, along the keel or stem to sternpost styled " along the ram," but the " rule-cheaters " added even longer counters frequently immersed up to one third or even more of the " measured " length so that the " law makers " had to control matters by bringing in half the length of the counter as " taxable " length. There were two classes—" large," 26 ft. " on the ram," and " small," 16 ft. on deck. They were very beamy, and very full and wide in the bow to enable them to support the huge foresail, but even so they were apt to run under when sailing hard off the wind. *Maria* was a most famous lateener, taken to Barton Broad by Sir Jacob Preston, she was built by Brown of Yarmouth ; she was at Wroxham in 1894, and raced at Barton in 1897. Length 23 ft., 8 ft. beam, 3 ft. draft. At Oulton Broad *Enchantress* and *Miranda* were a notable pair and they raced there with the sloops—length 19 ft.



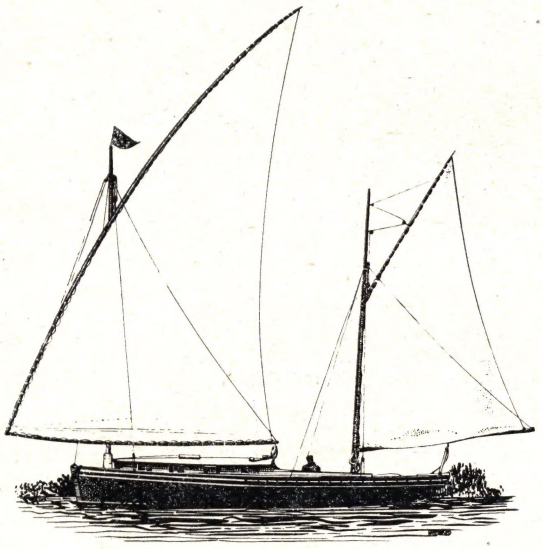


Above : *Wherry at Ludham, River Ant—Bow view*

Below : *Wherry at Ludham, River Ant—Stern view*

between " perpendiculars," plus 6 ft. " counter," about 10 ft. beam, and 4 ft. draught. It seems incredible, but the length of the foreyard of these boats was about 60 to 70 ft.—i.e. three times the length of the hull. As the fine weather foresail was so lofty and once hoisted could not be reefed the racing lateeners were a " handful " in a freshening breeze.

The Norfolk Sloops began to succeed the lateeners about 1850, and were well supported by the Norwich cavalry officers. They were rather handier than



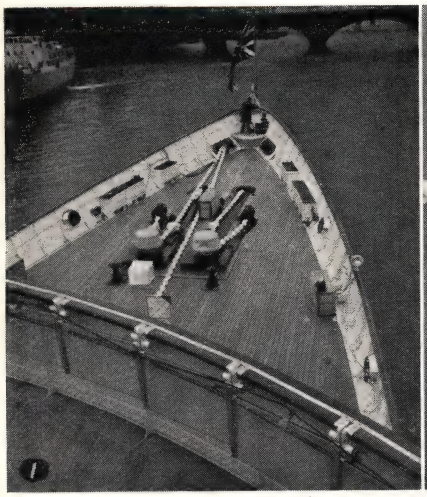
Rig of typical lateener

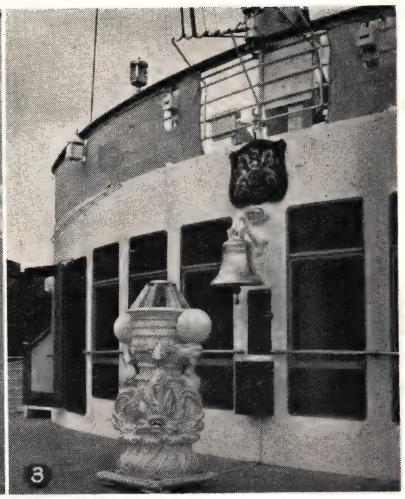
the lateeners, and being rigged in a distinctive local style looked and acted much like them when viewed from afar. Their special feature was the huge single jib of tremendous pulling power being set on a bowsprit as long as the hull ! The gaff mainsail used with a boom was on race days surmounted by a large square-headed yard topsail—all this was hoisted high to catch the breezes coming across the marshes. In those hearty days restriction of sail area by rule was of course unthinkable, and as the idea was to " carry on " to the limit additional men were taken on board as ballast and thus personal weight became a very favourable qualification for crewing on regatta day. The original sloops, like the lateeners, had long, flat, shallow hulls, but in time the jibs became smaller and the bows finer. The sloops were fitted with roof-top cabins with luxurious fittings and were much used by their owners for cruising purposes. However, after years, such boats became too big and the sail plant too unwieldy. A class of " wherry " rigged yachts supplanted them for cruising, and many trading wherries were converted because their big holds made commodious living rooms. The earlier sloops had long straight keels, square forefoot, and large rudders ; the later cruiser-racer types was smaller and had short fin keels with lead bulbs ; they made a good show under canvas—our photo taken in

Lateener " Ariel " near Oulton Broad

1903 on Oulton Broad shows that they were popular. Of the older boats *Trixie*, a 10 ton smallish craft which had remarkable success in racing, built in 1883, sailed much on Oulton Broad and was the adoration of my youth ; her length over-all was 27½ ft., length stem to sternpost 20½ ft., length on water line 24 ft., beam 6½ ft , draught 3¾ ft., main boom 25 ft., bowsprit outboard 22 ft., ballast 2½ tons inside and 1½ tons lead keel outside. Sail plan was : single big jib, gaff mainsail laced to boom, large gaff topsail. In later years I built a good model 10-rater on her lines.

All this sport lead to a great increase of yachting clubs at Norwich, Yarmouth, Lowestoft, and elsewhere. The premier of these was the Royal Norfolk and Suffolk Yacht Club with headquarters by Lowestoft pier. The impressive racing of the very large boats has ceased ; but there are compensations and nowadays legions of small class racing boats, open boats, and motor boats of excellent quality give much pleasure to the younger generation. Apart from the excitement of yacht racing, Broadland cruising, especially under canvas, still holds great charm for those who know where to go and how to choose the right season of the year. A specially planned sloop of light draught and good cabin accommodation can be sailed anywhere into the wilds and far from the madding crowd. There is not yet a policeman on traffic control duties at Thurne Mouth ! There are still the lovely flowers of the marshes and the river side, the wilderness of Heigham Sounds and Hickling, the characteristic birds, fish, and wild life ; always the magic of the cloudland ; also the sun by day, and the moon and stars by night, brother—likewise the winds across the wastelands, and the rippling of the waters.

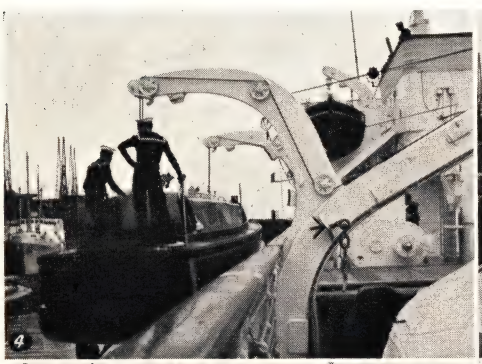


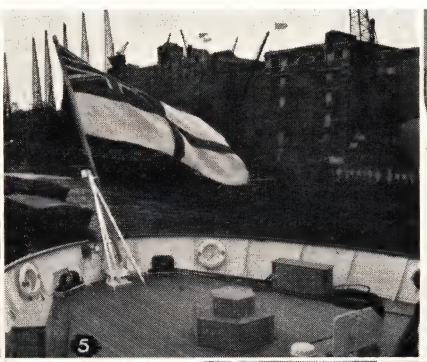


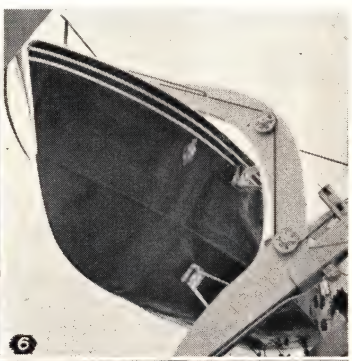
DECK DETAILS OF H.M. YACHT BRITANNIA

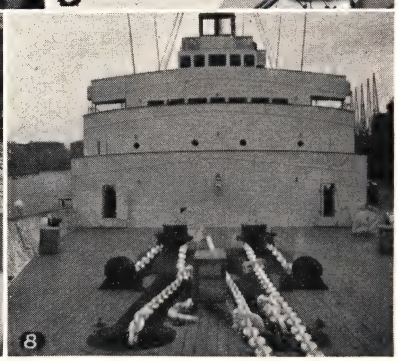
1. *Looking down on fore deck from the bridge showing the flared bow, the anchor chains and capstans.*
2. *Standard Compass and Instruments in Chart House.*
3. *Antique Binnacle from King George the Third's yacht, with windows of verandah on shelter deck behind.*
4. *Welin-Maclachlan Davits in lowering position and, in background, another pair with boat stowed.*
5. *View of the upper deck at the stern of the ship.*
6. *Bow of the Royal Barge : note pads and brackets on davit for supporting the barge and also the triple screws.*
7. *The Royal Barge as seen from the Bridge Deck. Owing to the short range this was taken in two exposures.*
8. *The Bridge as seen from the stem head. Note the look-out built specially for the Queen's home-coming in May.*

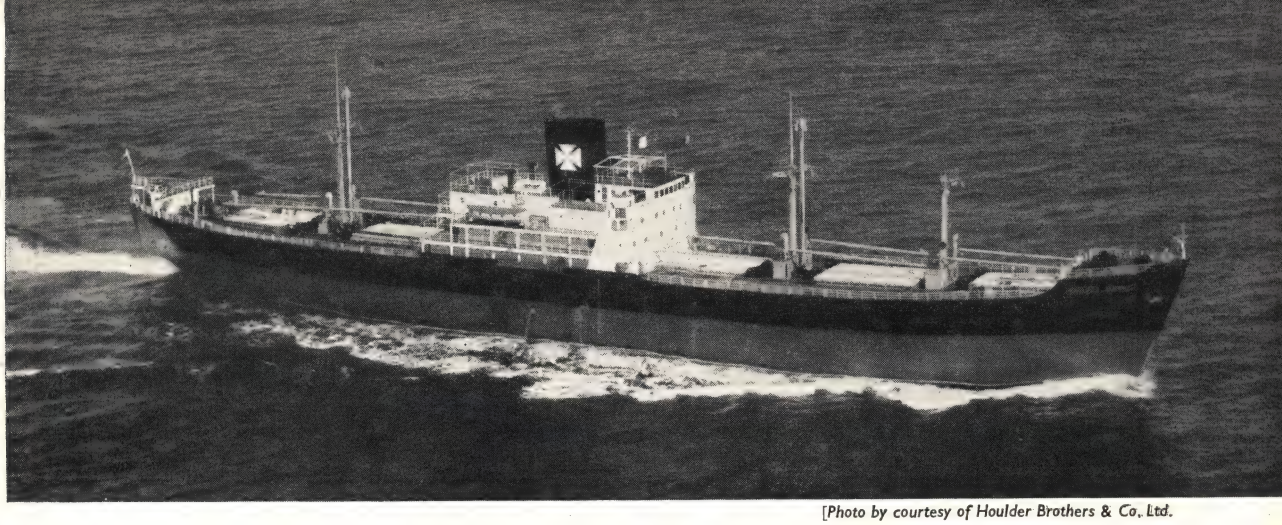
Note : The model-maker should study these photographs in connection with the drawings published in our May issue.











[Photo by courtesy of Houlder Brothers & Co. Ltd.

SHIPS

MEDITERRANEAN

THE Queen during her recent visit to Malta unveiled a memorial to all those of the R.A.F. who lost their lives over Southern and South-Western Europe and the Mediterranean and have no known graves. The Royal Air Forces Association organised a pilgrimage to the island for the occasion, 550 relatives of those killed being taken there either by air-lift or land and sea. The latter, numbering 306, travelled to Venice by train, making the sea passage each way in the specially chartered liner *Mediterranean*, which also served as a floating hotel during the stay at Malta.

This Greek owned, white painted vessel is none other than the former Canadian Pacific coastal liner *Princess Charlotte*. A twin screw ship of full superstructure type, she was designed for the Pacific Coast service. Completed in 1908, her builders were the Fairfield Co. Ltd., who also built her twin sets of triple expansion engines. The ship remained in Canadian waters until 1949 when she was sold to the Typaldos Lines of Piraeus.

Today the *Mediterranean*, which has a gross tonnage of 4,500 (11,200 displacement) is the largest of five passenger ships owned by this firm, which maintains a number of regular services between Greece, the nearby islands, Istanbul and Italian ports. The ship herself normally operates between Venice, Brindisi, Piraeus, Istanbul and back. After her purchase the *Mediterranean* was given a very thorough reconstruction at Piraeus, when her former three funnels were replaced by a single and larger one with trunked base. For international voyages she has accommodation for 399 passengers, a figure which may be increased to 900 if engaged on inter-island service. A notable feature of her design is the large garage holding 29 cars, into which vehicles may be driven through side doors in the hull. Both ship and engines have been so well cared for that she is still good for a speed of 20 knots.

[Photo by courtesy of Typaldos Lines

Above : *The* 8,450 *ton general cargo ship "Thorpe Grange" of the Houlder Line*

Left : *The Greek liner T.S.S "Mediterranean" formerly the C.P.R. coastal liner "Princess Charlotte"*

Right : *The* 6,858 *ton ore carrying ship "Orelia"*

in the news

ORELIA

One of the most notable developments in British shipping during the last year has been the appearance of a new type of specialised cargo ship, the ore carrier. Hitherto many of the general cargo vessels employed in bringing ore to the United Kingdom have been small and unsuitable for the purpose. In view of the planned increase in the British production of pig iron and the resulting step-up in the imports of iron ore, several companies, acting on the advice of B.I.S.C. (Ore) Ltd. ordered a number of specially designed ore carriers. These vessels were so planned as to permit the maximum rate of unloading and also the greatest carrying capacity on a light draught. Of these ships six were ordered from Wm. Gray & Co. Ltd. by Ore Carriers Ltd., a firm owned jointly by Houlder Brothers & Co. Ltd. and the British Iron & Steel Corporation Ltd.

[Photo by courtesy of Ore Carriers Ltd.

The first of this group, the 6,858 ton *Orelia* ran trials in February, while the second, named *Oreosa* was delivered on May 25th. They have an overall length of 427 ft. and a beam of 57 ft., the deadweight capacity being 9,000 tons on a draught of 25 ft. The first four in this series will each have two Gray-Polar type diesels geared to a single shaft, while the last two ships will each have a single direct-drive Hawthorn-Doxford type diesel engine. In each case the b.h.p. will give a service speed of 12 knots.

The dimensions of these vessels have been suited to meet the limitations of Port Talbot, Glam, which is the site of the world's biggest steel plant. Their light draught also enables them to use the full range of ports engaged in the ore trade.

As the illustration shows, the *Orelia* has her bridge, engines and accommodation aft. Forward of these are two holds. The first of these is served by one hatch, while the much longer No. 2 hold is served by the remaining three. Sliding steel hatch covers are fitted, and to take the neccessary lifting gear a short column is stepped at the forward end of each hatch. The holds occupy approximately half the width of the hull, the side spaces as well as most of that forward being devoted to water ballast.

The colouring of these ships is attractive. They bear the familiar Houlder house-funnel design and have that firm's usual black hull and red boot-topping. The name and port of registry however, are painted in yellow, while the masts, hatch columns, deck fittings and end of fo'c'sle are a bright buff. In contrast, the hatch coamings are painted a rich crimson.

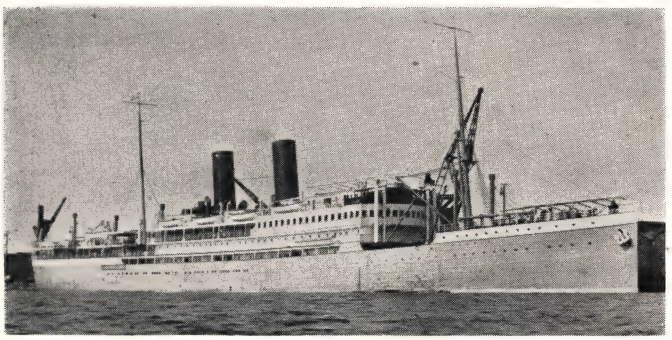
The four remaining ships in this series will be named *Orepton*, *Oredian*, *Oregis* and *Oremina*.

THORPE GRANGE

The Houlder Line has also been augmented by another vessel of very different type. This is the *Thorpe Grange*, a general cargo carrier of approximately 8,450 tons gross, which left London on May 14th, on her maiden voyage to Buenos Aires. The first ship built by Bartram of Sunderland for these owners, she measures 476 ft. 8 in. on overall length × 62 ft. beam × 40 ft. 2 in. depth to upper deck. The load draught is 29 ft., corresponding to a d.w. capacity of 12,050 tons. In general external layout shape she resembles the *Oswestry Grange*, built two years ago by Hawthorn Leslie and the year-old, Burntisland-built *Queensbury*, owned by the associated Alexander Shipping Co. Ltd. The latter, however is smaller and is of open shelter deck type, with consequent reduction in tonnage. Her engine arrangement too, is quite different, being fitted with two diesels geared to a single shaft, whereas the two *Granges* each have a single Doxford type engine. In details of superstructure the new ship shows interesting variations, and unlike the earlier *Grange* does not have raised winch platforms. The previous ship of this name was built in 1889 as the *Indramayo*. Bought by the Houlder Line in 1901, she remained in their service until 1930.

ALEXANDR MOZHAJSKI

In an earlier issue I referred to the veil of secrecy which surrounds the movements of Russian liners. This was partly prompted by arrival in London of their *Chukotka* and also by the sighting from the deck of the Southampton-bound *Olympia* of a large white painted passenger liner which was bound down



Left : The 9,900 ton Rotterdam Lloyd Liner "Patria," now the Russian ship "Alexander" Moxhaxski"

Below : The 2,916 ton Russian ship "Beloostrov" now on the Leningrad-London service

Channel in company with a new suction dredger. Poor visibility made their names invisible, but there seemed but one possibility, that the larger ship was the former Rotterdam Lloyd liner *Patria* in a new guise, despite the fact that this ship was portrayed in Jane's as the Russian *Svir*, a training ship with a single funnel.

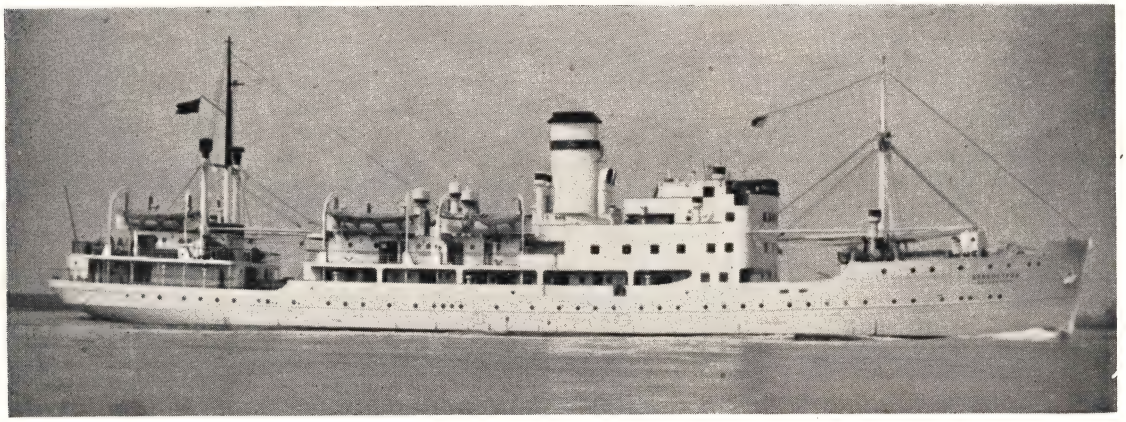
Recently there came confirmation that the *Patria*, later *Svir* had been renamed *Alexander Mcxhaxski* and had left Riga for Vladivostok in company with the suction dredger *Azofski*, the two ships arriving there early in April.

As built in 1919 the 9,900 ton *Patria* was the crack passenger ship in the Rotterdam Lloyd fleet, and was also notable as being the first Dutch passenger liner to be fitted with turbines. Unlike her predecessors she had two funnels. This feature, with the rest of her general design was repeated in the slightly larger *Slamat*, which marked the peak of Rotterdam Lloyd steam driven passenger ships. Later the dummy after funnel was removed and in 1935 the ship, after a long and successful career on the Far Eastern run, but by now eclipsed by newer tonnage, was sold to Russia. Like the *Chukotka* she has been altered but little externally—with the exception of the funnel. The new one that has been fitted is about ten feet shorter than the original, and about twice its fore and aft length. This is placed rather far forward, giving the vessel a somewhat unbalanced appearance. The whole of the exterior of the *Alexander Mcxhaxski* is now painted white, with the exception of the boot-topping and the red band around the funnel, which also bears the usual sickle, etc.

BELOOSTROV

A much smaller Russian ship which for a variety of reasons has featured in the news during the past few years is the 2,916 ton *Beloostrov*, which is engaged on the Leningrad—London service. In the middle of May, when she was on the point of sailing from London, taking with her two Soviet diplomats expelled for attempted spying, she was arrested by order of the Admiralty Marshal. This was the result of damage she inflicted on the Dutch coaster *Marvic* in October 1952, during a collision in the Kiel Canal. A surety for the sum involved was soon forthcoming and the ship sailed a few hours later.

The *Beloostrov's* Finnish origin is betrayed by the shape of the deep cowl top to her smoke stack. Formerly named *Aarlotar*, she was built at Elsinore in 1937 for the Finland Line, a 14½-knot steamer with accommodation for 98 first and 85 third class passengers on a length of 295 ft. The ship has been affected by two wars, the first being the Russo-Finnish one, during which she was laid up. After the second world war she was one of the many Finnish vessels taken over by the Russians as part reparations payment. She received her present name in 1946, since when she has mostly been on the London, run, operating alongside the older *Sestroretsk*, another ex-Finnish ship.



MASTER in SAIL

INSTALMENT SEVEN

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PERCIVAL MARSHALL
Price 12/6.

BY CAPTAIN JAMES S. LEARMONT

The Brenda *had never been an easy ship to sail, but Captain Learmont had brought her safely through the worst of gales and storms, and had even achieved some splendid runs through exercise of his considerable skill and knowledge. It was a sad blow then to lose her, as he did, through fire in Valparaiso. He had managed to cope with the sea, he told himself as he looked at the red-hot burnt-out shell of his ship, but fire, the worst enemy, had beaten him at last.*

AFTER the cargo was discharged the ship was dry-docked for cleaning and painting at Blohm and Voss's. Hamburg had a splendid system for dry-docking ships. For an inclusive charge, the firm that you selected took over the whole operation, providing riggers to unmoor the ship, a pilot and tugs to shift her and then, when the job was finished, they would take her to whatever berth you wanted. In this case the whole job was completed within 24 hours; they used lifting docks and I saw the *Brenda*, drawing 12 feet of water, raised so that we could walk round her inside half-and-hour from taking the blocks. If a wet dock had been employed it would have taken four hours to pump it out. This done, we went to our loading berth in Hansahaven to load a cargo of fertilising salt for Honolulu. As I had been three years without a holiday I went home with my wife, children and mother by the Leith boat.

On May 14th, 1905, we sailed from Hamburg for Honolulu. We had a very fine passage through the North Sea, but in the Straits of Dover we encountered a dense fog during which we grounded on the Goodwin Sands. Knowing that we were in the vicinity of the East Goodwin, I was forward trying to pick up the then, very poor fog signal. The *Brenda* was driving to the westward with the tide and I noticed that the head yards braced up on the starboard tack were aback through her driving over the ground, even though it was a dead calm. On returning to the poop I went to the standard compass to see how she was heading as she was not steering. Suddenly she swung from SW to NNE; then I knew that she was ashore even if no one had felt the touch.

As soon as my fears were confirmed I ordered that two boats should be lowered. The sea was like a mill pond. Both kedges were brought aft and lowered down to the sterns of each lifeboat. Then I had two hauling lines and two wires coiled in the boats; in case the boat should get adrift a coil of rope was used as a "guess warp." One end was secured aboard and when they reached the other end they dropped the kedges and signalled to be hauled back as they paid out the wires and hauling

continued from June issue, page 211

lines. We got the end on board and taking them to the capstans on the after deck they were hove tight.

Nothing could be done for the moment as the tide was ebbing, but the short night was soon over, and with daylight we could see how we were situated. At low water, which was about five in the morning, the fore foot or stem of the *Brenda* had dried to about two feet, but the stern was in deep water and the water was close up to the moulding under the counters.

About this time the fog cleared. The light vessel, about half a mile from us, started to fire her guns, and as if by magic, boats of every description poured out of Walmer, Deal and Ramsgate. Their aim was, of course, salvage; the boatmen in this vicinity know every trick of the trade where their assistance by "timely aid or local knowledge," can be classed as "rendering valuable service" to a ship ashore on the Goodwins with its evil reputation. I refused assistance from them with the warning that if they dared to come aboard it would be very dangerous for them. Several of them in spite of this tried to climb up, for if they could so much as touch a capstan bar they could make a legal claim of "having assisted," but a tap on their fingers put an end to their wishes to get a footing on what they imagined would bring them in a good chunk of salvage.

Later, the Ramsgate lifeboat in tow of the local tug came on the scene. As the wind was now NNW I had laid the head yards aback ready to back her off now that the tide was making. The lifeboat was, like the others, after salvage; there was no question of saving life, as no one was in any danger. The lifeboat was in such a hurry to get alongside and stake his claim that his mast became entangled in the gear of the foresail. Laughing at them, I told them this was not the correct way to come alongside of a "wreck," he should have unshipped his mast and dropped alongside with a sea-anchor out. I then warned them that they must not attempt to come on board, and holding up the rifle I was carrying told them that I had already threatened to shoot anyone who did so.

Then the tug got into action, he wanted to give me his rope, but I would not take it. I offered him £50 if he would tow me clear. He roared with laughter at this offer, saying, "Fifty pounds for towing a valuable ship off the Goodwins!" No, he would get salvage, and if I didn't take him my ship would, like many others, be a wreck. Meanwhile my wife who was in the dark about was going on, got up from bed and looking out of the port hole was surprised to see a lifeboat passing.

All hands, excepting those on guard, were standing

by the after capstans ready to heave away at my command. I, as might be expected, was watching the tide rising. At this time the lifeboat came along our starboard side and crossed to port over the ropes that were attached to our kedges. Just then I noticed the ropes slacking, and thought at first, that this was due to the lifeboat's action, but it was really the *Brenda* afloat and coming towards the kedges. I sang out to the men to heave away on the capstan and the *Brenda* with her head yards aback swung seaward. The kedges being recovered she got sternway, backed away clear and was soon steering down Channel.

Neither the Deal and Walmer boatmen nor the lifeboat crew were a bit pleased when we floated and sailed away; indeed the fury of the latter throughout was unbelievable.

We passed Staten Land 60 days out from Lizard and 67 from Hamburg. This, for a ship of the *Brenda's* type was very fair.

After rounding Staten Land we encountered a series of gales and high seas. On the following night we were lying hove to under two lower topsails. As I stood under the canvas dodger in the mizzen rigging, a little boy from Grimsby, aged about 14, was holding on with the mate on watch and the apprentices. This little boy was close to me and looking up said, " Do you think she will sink, sir ? " It was, I am sure, a terrible experience for him, the decks full of water, the howling of the gale in the rigging and the ship heeling all the time with the rail under water. " Oh no, sonny," was my reply, " she is all right."

Cape Horn has so many moods that it was impossible to lay down any set plans to weather it. I had rounded it in so many different conditions that I knew one had to be ready to take every opportunity to obtain even a slight advantage.

On this rounding of Cape Horn, conditions were exceptional. It was not difficult to make westing, the difficulty was to make northing. We experienced gales from N. to NNW. For these conditions I adapted my plans, and from results obtained they were completely successful. As long as the barometer was falling I drove her to the limit on the starboard tack heading west. The moment the barometer stopped falling it was " Shorten sail; " " Clean her down " was my own particular way of putting it. With the upper topsails and foresail furled we were ready to wear directly the wind would jump into the W. and SW. perhaps going into the S. for a short spell.

Sixty days from Cape Horn we arrived at Honolulu, 127 days from Hamburg. As we stood in and anchored between Waikiki Beach and Honolulu we thought that this was the prettiest landfall we had ever made, with the red-roofed bungalows nestling in the beautiful foliage and the surf breaking on the beach about two miles distant.

Mr wife and I and our boy, had a wonderful time at Honolulu. We went for trips all over the island of Oahu, and went to churches and concerts to hear native choirs as we were fascinated by the plaintive airs sung in true Hawaiian style. We went up the valley to the north of the city and heard the story of how in battle a chief drove his enemy over a cliff fully a thousand feet high. Guavas were plentiful by the roadside, growing wild, so we just plucked what we wanted. We had so much hospitality from our friends that we fixed up a big party in return, asking all to a reception on board which was pronounced a huge success. Our cargo of salt was so clean that the *Brenda* was more like a yacht than a cargo wagon, and I had a fine steward, now on his fourth voyage with me.

My orders from my owners were to take in ballast and proceed to Sydney Heads for orders. At that time the Americans were engaged in building the naval base at Pearl Harbour, which was on the lee side of the island and close to Honolulu. From a Japanese who was working as a contractor at the making of the base, I bought 1,000 tons of ballast at a favourable price.

Twenty-three days out from Honolulu we arrived at Sydney Heads, and there we received orders to proceed to Newcastle, N.S.W. We had made full use of the fine weather coming down to have her cleaned and painted, and the decks holystoned and oiled; she was in first-rate condition when we arrived.

We obtained good dispatch through our ballast being wanted, and moved out to Farewell Buoy, after loading our cargo of gas coal. It was a nice cargo, with no dust, and as it contained no small or slack coal the trimmers had had to trim her hard to get her deadweight in but she was full up fore and aft.

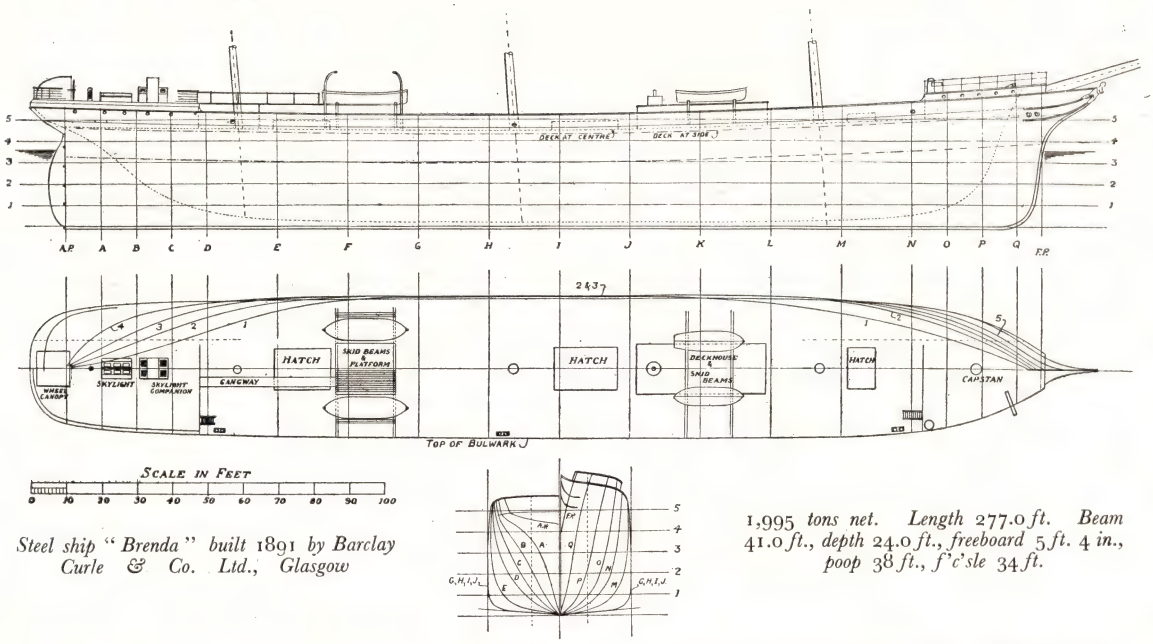
We shared the buoy with the American five-masted schooner *Kineo* of Bath, Maine. She was loaded and preparing for sea like ourselves, and Captain Patten also had his wife and child with him.

The *Kineo* must have been a brute at sea, having no bulwarks, just a shelter-deck with stanchions and chain guard-rails. On account of the small crew they kept steam up for the winches all the time at sea, to help in handling the big sails. Frequently the master had to go right forward to see to the boiler and owing to exposed decks his wife was so anxious about him that when he arrived there he would telephone her to say he was safe. Captain Patten said to me, " This is the first ship of this kind that Sewall has sent round the world and I will take damned good care that it will be the last. We sailed before the *Kineo* and left Newcastle, to the usual waving of good-byes from girls that our boys were leaving behind, bound for Valparaiso.

We had a remarkably fine passage, with no westerlies to speak of. Our track was like a zig-zag, with the yards on the backstays most of the time. We arrived at Valparaiso 48 days out. Other ships had made about the same passage.

I had no difficulty in chartering my ship to a nitrate port with a general cargo that included baled hay. This was the principal cargo carried from Southern Chile to the nitrate ports. My freight was to be a lump sum of £1,200 to be paid on signing Bills of Lading.

In due course the loading was completed and I had intended to sign Bills of Lading next day, May 18th. At half-past five in the morning when the steward went into the saloon to get the milk and sugar



Steel ship "Brenda" built 1891 by Barclay Curle & Co. Ltd., Glasgow

1,995 *tons net. Length* 277.0 *ft. Beam* 41.0 *ft., depth* 24.0 *ft., freeboard* 5 *ft.* 4 *in., poop* 38 *ft., f'c'sle* 34 *ft.*

for the officers' coffee he found that flames were spouting up through the hatch leading to the sail-locker. The alarm was given and desperate efforts were made to get at the seat of the fire, but were of no avail, for it was deep in the cargo, and by the time it was discovered the ship was already badly on fire. Naval ratings from the Chilean warships were soon on the spot under the command of Captain Garcia, Captain of the Port. My wife was expecting a baby so I got her away in a boat to a friend's ship who had his wife with him. A boat from the *Gladova* brought Hughie Nish, who was in a way related to me. To him I handed the ship's papers, the chronometers, and my own private papers. My wife had to leave with only a few things and our son rolled up in a rug.

As we were now a danger to the ships in the harbour it was decided to tow the *Brenda* outside to the quarantine anchorage. The tug came under our bow, took our cable and at the same time gave us his tow-rope. They were experts, and at the same time as taking us in tow were picking up our anchor on their own windlass. The stern moorings now slack, were slipped and thus, a very sad sight, a burning ship moved out of the tier to what was to be her graveyard. The anchor we had lifted preparatory to sailing was now the only one we had left. The ship's lifeboats were lowered and in them the crew put their belongings.

On the anchorage being reached, the anchor was let go; she was now a mass of fire and the masts showed signs of falling. I gave orders for everyone to clear out. I was the last to leave her and as I left the three masts crashed over the starboard. The cargo, owing to its nature, was entirely consumed. By nightfall the proud *Brenda* was a red hot shell, nothing left. Hungry, dirty and just a little distressed on the loss of my ship, I returned to the ship *Poseidon* where my wife and boy were. My first and only shipwreck; the sea I had managed, but fire, the worst enemy of all, had beaten me.

To be continued

next month

The August edition of SHIPS & SHIP MODELS *will feature . . . .*

REGATTA REPORTS
These include the M.Y.A. Marblehead National Championship at Poole, the Radio Control Regatta at Poole, and the Model Power Boat Association Radio Regatta at Victoria Park, London. The reports are in each case accompanied by a wealth of interesting photographs.

A NEW MARBLEHEAD DESIGN
This is from the board of S. Witty who is making a name for himself for his yacht designs. The accompanying article gives the designer's views as to why he included the special features he has introduced into his design.

THE GRAND BANKS' SCHOONERS
In this second instalment Alan Villiers tells us more of the exciting season he spent with the Cod Fishing fleet on the Grand Banks.

FLEET REVIEWS
In next month's Fleet Reviews, Laurence Dunn will deal with the Ellerman Wilson Line. These reviews are proving quite popular and illustrate interesting details of modern tendencies and developments.
In addition we have the usual features: Tucker's "A" Class Double Chine Yacht, Collins' 50 gun ship, Sommerhoff's Radio Control Notes, etc.

You will not want to miss this issue so we advise you to . . .

PLACE YOUR ORDER TODAY

The Last Grand Banks Schooners

PART ONE ★ BY ALAN VILLIERS

THERE is still a last fleet of schooners going annually from Europe across to the Grand Banks and the Greenland fishing grounds, after salt cod. They sail from Portugal with the east winds of spring and stay out until September or October. This March, there was an impressive blessing ceremony of the fleet, as there always is, at the Church of the Jeronimos at Lisbon. A new four-masted schooner built last year—the *Luiza Ribau*—and a new dory-carrying motorship were joining for the first time, and the fleet was over 60 strong, of which half were auxiliary schooners. There was also one last barquentine.

I heard of this interesting survival first from the Portuguese Ambassador at Washington, Dr. Pedro Theotonio Pereira—who is now at the Court of St. James—and, in 1950, at his invitation, I went down to Lisbon to make the annual fishing voyage with the schooners. I joined a lovely steel four-master named the *Argus*, a stately white vessel then ten years old and still going strong. She was one of a sailing fleet which included 31 schooners and the last barquentine. The Portuguese had 64 ships going to fish the Banks and Greenland waters—the 32 sailing ships, 13 dory-carrying-motor-ships from 600 to about 1,000 tons, 19 large trawlers of the most modern type (several of them new that year, and the hospital-cum-assistance ship *Gil Eannes*, with a 40-bed hospital, a staff of surgeons, an operating theatre, a priest, and everything that could be thought of to look after the other vessels. This was obviously an adventure on the grand scale, and I was amazed to discover that, though it had been going on from Portugal for at least four and a half centuries and probably for five, and Grand Banks schooners from America and from Canada had been hand-lining from dories under all conditions for at least half that time, apparently no one had ever thought it worth while to go and spend the whole season with the fishermen, quietly learning what they did, and photographing with colour film, black-and-white, and movie, the stirring life they led.

It was, I thought, about time that somebody did.

I joined the *Argus* with enthusiasm, for such adventures are increasingly hard to find in the present-day world. This was no fleet of pathetic old-timers, making a last forlorn stand! Many of the beautiful white schooners—14 of them were big four-masters—had been built within the past decade, several of them a few years ago. The majority were new ships. They looked more like big white yachts than cod fishing vessels, with their tall masts, graceful lines, and huge sail areas. They were the last working sailing fleet still going deep-water out of all Europe—and the world, too, to the best of my knowledge, if one disregards native vessels. They might be sailing-ships, but they were also modern to the last degree.. Almost every ship was powered, and the Portuguese naval architects had not made that so common error of putting insufficient power in a sailing ship so that she will neither sail nor steam. The *Argus* and her sisters were practically full motor-ships, as well as sailing ships, for they all had big diesel engines.

They also all were fitted with powered windlasses (for the endless anchor work on the Banks), electric light, and radio telephony. Most had echo-sounding, and large refrigerated rooms for carrying frozen bait, as well as steam-heating systems for the men's quarters and for the afterguard, large workshops, and patent steam presses for extracting codliver oil. The *Argus* had all these things, as well as a fresh-water capacity of 120 tons, a fuel capacity of 70 tons, and accommodation for at least 80 men. She was strengthened for navigating in loose ice: her main engine was a Sulzer diesel of 475 h.p.: her steel masts were hollow, the after-mast acting as an exhaust for the engines and the foremast exhausting the smoke and fumes from the steam-heating furnace down in the "rancho," as the 72-berth forecastle was called. She carried 60 dories, and her regular crew was 70 men and boys, of whom 53 were dorymen. When she sailed from Lisbon on April 1st, she was outfitted to remain a self-contained unit,

Opposite : The fishery schooner, "Argus" leaving Lisbon

Above : The fine bows of the schooner "Argus"

if needs be, for the following six months. She made only the one voyage annually.

Above all, she was a graceful and able vessel, a good sailer, and a good ship in the sea. She had the long, low profile of the big Gloucester schooner, the type developed especially for Grand Banks fishing, and the only marked variation between her hull-form and the typical Gloucesterman's was the big round counter. A Portuguese Grand Banker must be able to keep the seas for six months, if needs be, without touching port, and therefore all space is at a premium. That big round counter housed an enormous bos'n's locker, big enough not only to take all the fishing gear but to provide stowage for a score of barrels of brandy as well, and spare dory oars, sails, and the hundred-and-one things such a ship must carry. It was a comfortable counter, and she rode well in the seas.

The Portuguese fleet hails from the five main fishing ports of Lisbon, Aveiro, Oporto, Viana do Castelo, and Figueira da Foz. In March of each year the vessels, which have been laid up over the winter undergoing maintenance or just acting as storehouses for the previous season's catch of cod (kept in salt bulk aboard until the market is ready for it, when it is landed and dried), begin to assemble at Lisbon to prepare for the new season. There is much to do—salt to be loaded by the 100-ton, diesel fuel oil to be taken to capacity, as well as fresh water and stores; sails to be bent and rigging rove off again, dories brought back from the shipwright's yard where they have been overhauled, and restowed in stacks of six, each stack neatly contrived to leave as much working room on the deck as possible. Then, in the last few days before sailing, the dorymen—who have been fishing at home through the winter months—are summoned from the hundred hamlets round the sunny coasts. They are loath to leave, for they are all good family men and much attached to home and children. The rewards of a successful Banks voyage, however, are good—far better than they could amass in any other way—and it is traditional that the men from Fuzeta, from Olhao and from a dozen other pretty Algarvian fishing towns, from picturesque Nazare, from Ilhavo and Aveiro hard by, from Viana do Castelo, Vila Nova da Gaia, Espinho, Matosinhos, Povoa de Varzim, Lisbon, should go out with the fleet. It is a hard life, and well they know it: but it is their life, and its traditions are great, and enduring. Up to the last moment, wives and children of privileged crew members may live aboard, for the hour of parting is put off as long as possible. The doryman's life is a hazardous one: who knows who may not return?

When all is ready, the fleet is blessed. When possible, this is done by a service afloat, but the fleet prepares at a windy, cold season of the year, and generally there is a special blessing service in the great Church of the Jeronimos, by Belem, near Lisbon, with the schooners and the little motorships lying at anchor, gay with flags, in the wide Tagus just outside. His Grace the Archbishop of Mitilene, Dom Manuel Trindade Salgueiro—himself the orphaned son of an Ilhavo fisherman drowned upon the Banks—came to the door of the great church and gave his blessing to the assembled ships. The church was jammed with a great concourse of people, ministers of state, ambassadors, Commander Tenreiro of the Codfishing Shipmen's Guild, notables of all sorts, and schooner captains and dorymen, schooner cooks rubbing shoulders with leaders of fashion, deckboys alongside admirals, for the whole country takes an interest in its Banking fleet. This is not only because of its considerable contribution to the country's food supply—for all the dried cod it can catch is insufficient to meet the demand and much has to be imported from Newfoundland—but his great maritime past has deep roots in the soul of every Portuguese. The Church of the Jeronimos, houses the mortal remains of the great Vasco da Gama and, across the aisle from the illustrious explorer, the equally great Portuguese poet, Camoens, whose *Lusiadas* sing the praises of the globe-circling pioneers. The Portuguese retains a considerable interest in the things of the sea, though he may not serve in ships. Indeed those least moved at the impressive blessing service were the dorymen themselves, gaunt, weatherbeaten men, strong-faced, with the grace of a simple nobility about many of them, almost all dressed in the same way—bright checked shirts, striped trousers, thigh sea boots, turned down at the knee, and a sou'wester for headgear, or a Nazare stocking cap.

When the service was over, we hurried off to sea, going down the blue and smiling Tagus as so many Bankers had before, and across the Bar. With us sailed out sister ship *Creoula*, the three-master *Hortense*—a beautiful product of the famous Monica yard at Gafanha near Aveiro—and two motorships. It is customary for the ships to sail in small groups of three or four, for they are small vessels in the wide Atlantic. The small groups keep in constant R/T touch, so that if any is in trouble the others may help. A special clause in the fishermen's contract stipulates that there shall be no salvage claims in the fishing fleet, for each ship is bound freely to offer the help she may well need herself.

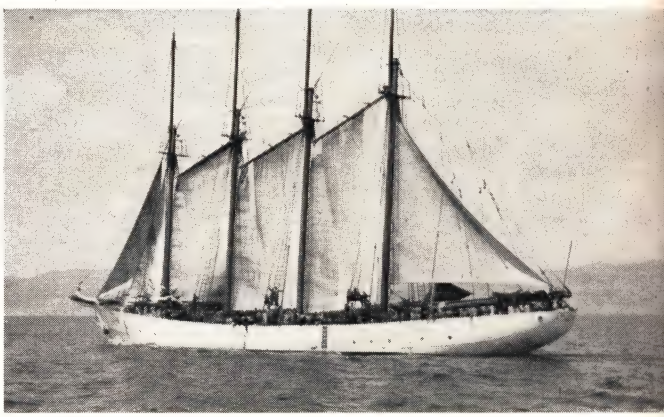
Above, left : Preparations for the fishing on the schooner " Argus " on the way to the grounds

Outside the wind was fresh from the east, for we had sailed with the east winds of spring. We bounded along towards St. Michaels in the Azores, where we were to embark another 26 dorymen and several deckboys. The Azorean fishermen and whalemen have been famous for many years, and many a Yankee whaler out of New Bedford, or Mystic, or old Salem, had touched at Ponta Delgada for the same reason that took the *Argus* there—to ship good men, competent, fearless small-boatmen, skilled with fishing gear and harpoons. (Not that we needed harpoons.) Our call at Ponta Delgada was a brief interlude, long enough only to embark the waiting men, for the same dorymen ship in the *Argus* year after year. With them aboard, we hurried on towards St. John's, in Newfoundland. For some odd reason, all the bait fish were gone from the Portuguese coasts during the months preceding our sailing, and this meant that the whole fleet had to touch at St. John's to buy fresh herring as bait there. A doryman cannot use his long lines without bait.

During the whole of the westbound crossing the North Atlantic, wherever the weather permitted, preparations for fishing went on at a furious rate. First, the stacks of dories were broken down, and the dories spread wide on the main deck. They were, all exactly the same, but the men drew lots for them, each taking in turn a small piece of wood from a bag the captain held. On that piece of wood was the number of the dory that would be his for the voyage, for the Portuguese always go single-handed in their dories. The Azoreans kept their dories stacked on the port side of the ship, and the dorymen from the mainland had theirs on the starboard side. Every dory had to be prepared by fixing thwarts, bulkheads, plugs, leads for the fishing lines, tiny masts for the sails, rowlocks, and so forth. No carpenter was carried and every man did his own woodwork. Masts were made from bits of branches cut, I noted, from Australian eucalyptus which had been grown in Portugal. The dories had to be prepared each voyage because all the gear had to rig down to permit one to fit inside the other in the stacks: at the end of the campaign, much was lost, for it was all loose. Timber is cheap and plentiful in Portugal: at the end of one fishing campaign, nobody is worried about the next, and a few odds and ends may go overboard.

When the dories had been prepared, and emblazoned with religious mottoes (which also adorned many of the sails) and frequently also with the names of the men's wives, or little children, they were all stacked again, and then the men got on with preparing their lines. They fished with two types of line, the one a hand-line with a lead jigger (shaped like a herring, with two large hooks) at the end of it, and the other a long-line, which the Canadians confusingly call a " trawl." For the Grand Banks fishing, these long lines—which consisted of lengths of codline to which, at intervals of a fathom, were

Below : The 4 mast schooner " Creoula," sister-ship of the " Argus "



attached small subsidiary lines called " snoods " which carried the actual hooks—were prepared to take 400 to 600 hooks, but in Greenland waters it was customary to use more hooks. Each long-line was formed from standard lengths of codline, to each of which 50 hooks were attached, and a man, apparently, could please himself—within limits—how many units he used. None had less than eight, and none—at that stage of the voyage—prepared more than 12, each of 50 hooks.

Everything was done with thoroughness. Even such jobs as whittling a short cudgel (for hitting large cod on the head) was done with care, and every hook, every "snood," every piece of lead used as a sinker, every swivel, every hitch, was prepared with an intense application. Though some gear was used from the previous season, most was new. It was handed out by the captain, with the mate beside him listing everything.

Next month Alan Villiers continues the story of these modern Portuguese schooners and their fishing in the Grand Banks.

the new surveying ship H.M.S. VIDAL

with notes and a drawing by LAURENCE DUNN

SOME illustrations and a short description of the Royal Navy's latest surveying vessel, H.M.S. *Vidal*, appeared in the May issue of SHIPS AND SHIP MODELS. In view of the many interesting features incorporated in this ship we now supplement these with a sectional drawing as well as some further notes which may be of interest to the model maker.

The *Vidal*, it will be remembered, was recently completed by the Royal Naval Dockyard, Chatham, and is the first survey ship to have a helicopter flight deck. Her main dimensions are 315 ft. overall length × 40 ft. breadth × 18 ft. 3 in. depth. Unlike her predecessors, the *Vidal* from her inception has been specially designed for hydrographic survey work and naturally much of her interior space is devoted to this subject. The most important of these compartments are the echo sounding house on the bridge, the surveying chart room nearby, and the photographic dark room and the two printing rooms which are all in the hold, four decks below.

S.55 " Whirlwind " helicopters as used in H.M.S. " Vidal "

Apart from the Captain, who has his quarters in the bridge, all the officers are berthed aft, with cabins port and starboard, and the wardroom on the port side at the aft end of the superstructure. The ship's main propelling motors are the new Admiralty Standard Range 1 type. Four in number, they each have 12 cylinders. Two of these engines are connected to each shaft, through reduction gearing and reversing clutches. The two units driving the starboard screw are in the forward engine room, the port side units being in the after compartment. The opposite spaces are occupied by auxiliary machinery.

As regards external appearance the model maker will note the *Vidal's* slim fore deck and fuller lines aft, which are needed to provide room for the helicopter landing deck. The hangar, which is forward of this space, is designed to house a " Whirlwind " S55 type helicopter. The stern is rounded and has a T shaped recess to house a Danforth type anchor. Probably the most dominating external feature of the *Vidal* is the magnificent bridge which has a very rounded front and tapers away aft in vee fashion. Between this and the mast there is, on each side, a short overhanging deck. That on the port side is clear, but to

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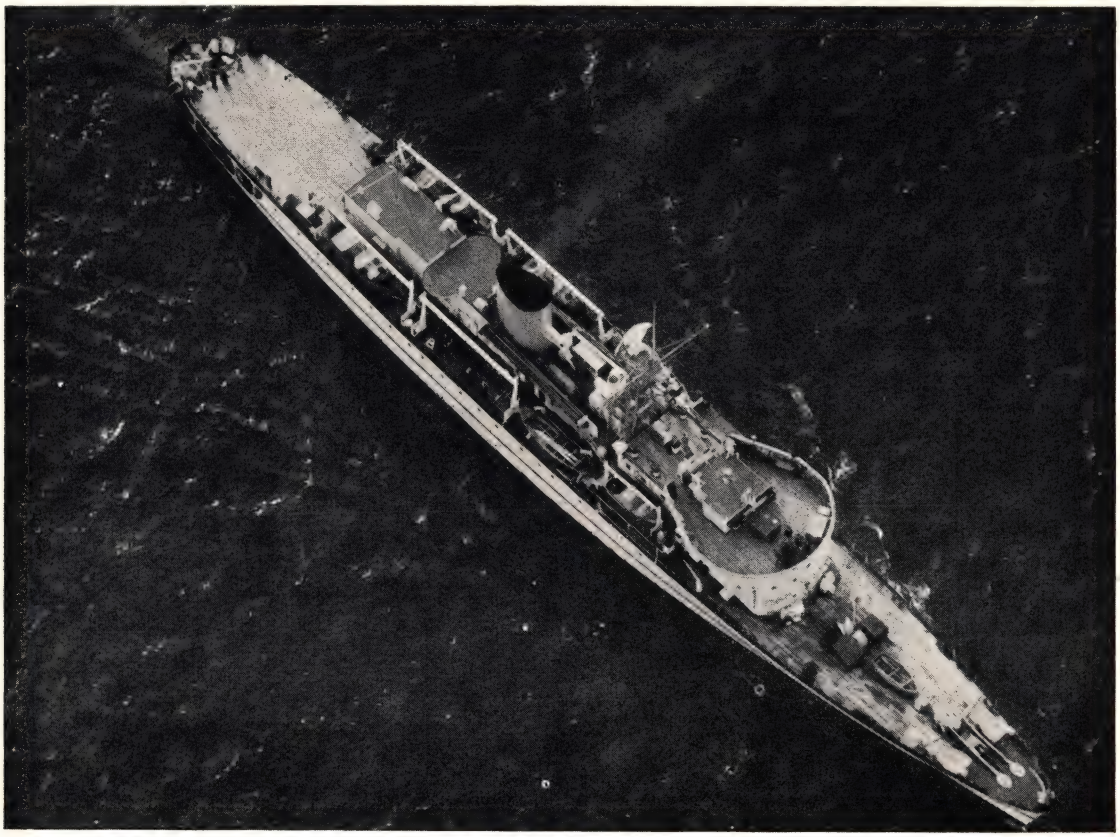
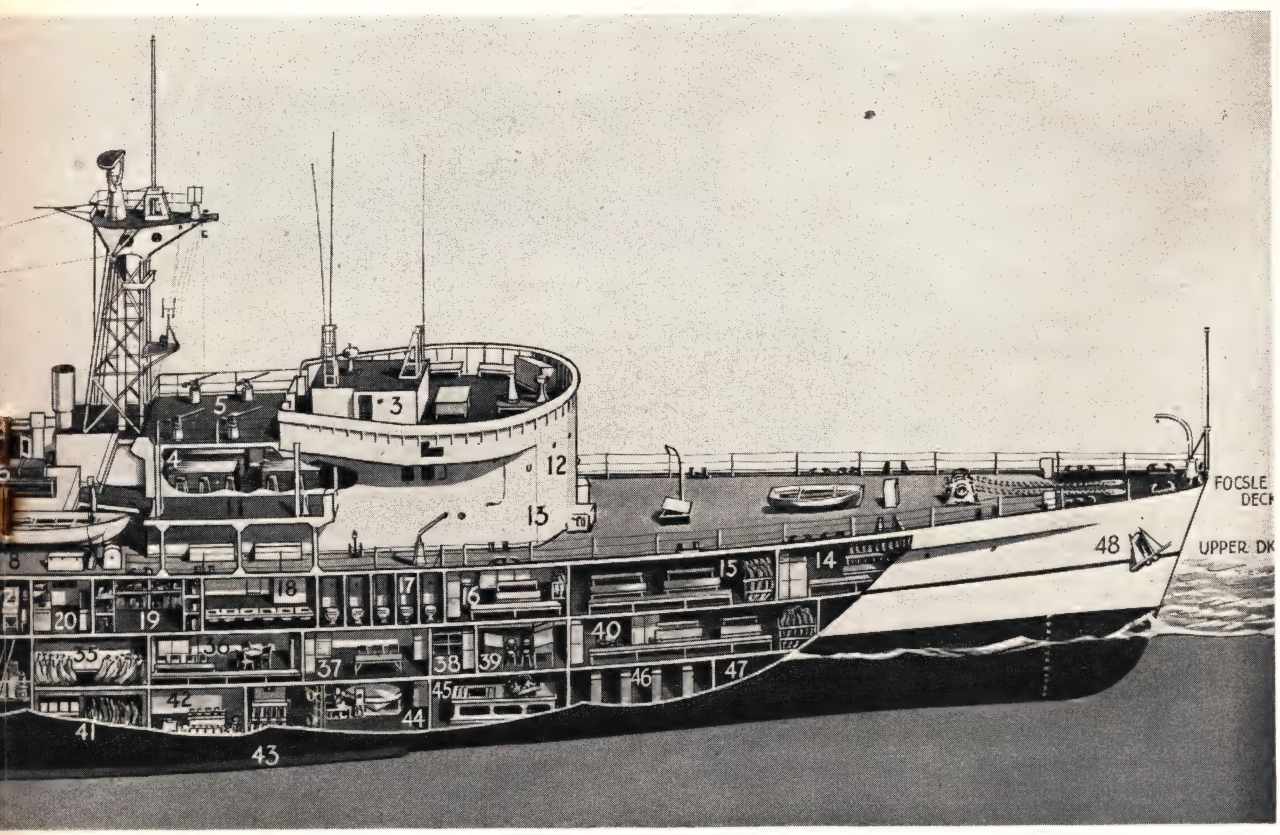
LAURENCE DUNN.





Above : *Cutaway drawing of the Royal Navy's survey ship H.M.S. "Vidal"*

Left : *Aerial view of H.M.S. "Vidal" showing deck plan.*

KEY TO DRAWING OF H.M.S. VIDAL

1. Hanger
2. Vegetable locker
3. Echo sounding house
4. Surveying chart room
5. Saluting guns
6. Ready use timber storage
7. Beacon pole stowage
8. 27 ft. surf boat
9. 32 ft. motor cutter
10. 28 ft. survey motor boat
11. 16 ft. surveying motor dinghy
12. C.O's. accommodation
13. Wheelhouse
14. Seamens' Mess
15. ,, ,,
16. Stokers' mess
17. Crews' W.C.s
18. C.P.O.s', E.R.A.s', and P.O.s' washplace
19. Canteen
20. Scullery
21. C.P.O.s', E.R.A.s', and P.O.s' dining room
22. Crews' dining room
23. Laundry
24. Stewards' mess
25. Officers' galley
26. Crews' reading room (wardroom, port side)
27. Officers' cabins
28. Workshop
29. Stores
30. Stores
31. Thrust block compartment
32. Stores
33. After engine room
34. Forward engine room
35. Flour store
36. E.R.A.s' mess
37. C.P.O.s' mess
38. Paper and Zinc room
39. Lithographic drawing office
40. Seamens' mess
41. Cold rooms
42. Refrigerating machinery
43. Bilge keel
44. After printing room
45. Forward printing room
46. Store
47. Fresh water tank
48. Danforth type anchor
49. Helicopter landing deck
50. Skeg

starboard there is a 16 ft. motor dinghy. Six other boats are carried under davits. The first pair (port and starboard) are 27 ft. surf boats. Next, on the starboard side there is a 32 ft. motor cutter. The remaining davits handle three 28 ft. motor survey launches, each of which is equipped with echo sounding gear. Beneath their white topsides and varnished canopies these three craft have copper sheathed bottoms.

The *Vidal's* decks are mostly planked, although at the bows the deck is of bare steel painted black. Aft of the lattice mast the house-tops are a dark grey. The colouring of the bridge however, strikes a brighter note, for there the inside of the bulwarks as well as sundry fittings are painted a very light green. The funnel and masts are a warm yellow and the hull has black boot-topping. Originally the topsides of the hull were all white, but recently a black ribbon has been added at upper deck level.

After surveying a small area near the Isle of Man, the *Vidal* will then proceed to the West Indies, where a much more lengthy task awaits her.

Modelling a . . 50 GUN SHIP

On the establishment proposed in 1733

Instalment no. 14.

By R. J. COLLINS

THE yards are held to masts by a " string of beads " called the parrell. Whilst for the upper masts these were quite straightforward, for the lower masts they were a little different as they had to be slackened or tightened according to need. Dealing with lower first, this consisted of a number of wooden balls called trucks, and ribs, the trucks had a hole drilled through their centre and the ribs were shaped to take ropes on their outside as well as threaded through. Fig. 102. The length of the ribs was the same as the diameter of the yard, the width being one third the length. As it is extremely difficult to describe in words exactly how the lower parrells are fitted I rely on the drawing which is somewhat diagrammatical. The running end of the fall was frapped to the root of the stay immediately below.

The parrells of the upper masts were much more simple. There were two rows of trucks but there were no tackles for slacking off. The whole parrell was secured direct to the yard.

As for the making of the parrells I have used small beads with excellent results, but be careful in chosing a bead of the correct size and colour. The ribs can be made of thin wood or thin black plastic.

There was no parrell for the spritsail yard but a sling. The parrell of the lateen is shown in Fig. 103. The crowjack yard was also slung.

There should be now spread out in front of the modeller all the masts and their fittings. He needs only the blocks and the ropes. I find it somewhat irritating when rigging to have to stop to make more blocks, so I put it as a *must* that all the blocks be made first. So we will start with the deadeyes.

I have been unable to find out the exact proportion of the parts of all these blocks. The blocks on the Museum model seem a little on the thin side. The deadeyes were approximately half the diameter of the mast they supported and were half as thick as their own diameter. It will be seen that each mast has its own size deadeye, but in all but really large scale models I think there would be an excuse for a little simplification. I made do with three sizes. Size one, fore and main mast ; size two, bowsprit, fore top, main top and mizzen ; size three for the standing lifts, etc., fore top-gallant, main top-gallant and mizzen top.

The best method of manufacture is to turn out the blanks on a lathe and drill by means of a jig. The simplest jig I know of was described in an early number of SHIPS AND SHIP MODELS, and as it is now very difficult to obtain, the editor has given me permission to " lift " it entire with its illustration . . .

Continued from June issue, page 233

" The prospective mass-producer should acquire a stout butt hinge, preferably a solid, cast affair, with leaves just under the thickness of the dead-eye to be made—drill a hole as at A in sketch (Fig. 104) of diameter to suit the deadeye body, and cut a slot as shown at C, about a third of the diameter of the hole in width.

" The hinge is now closed and hole A scribed off on the upper leaf, to serve as a guide when marking out the three holes B, which should be drilled with a drill of the same size as the intended lanyard holes of the deadeye.

" Finally screw the lower leaf to a scrap of board and fix a small handle to the upper leaf as shown.

" The procedure now is—turn up the deadeye from ebonite or other suitable rod, then when a supply is ready, pop one into hole A, close down upper leaf, keeping pressure applied to the handle (as the deadeye is a little thicker than the hinge leaf, this will prevent rotation), then drill through the three jig holes, lift up the top leaf, flick out the deadeye by using slot C ; with the point of the drill (if a hand drill is used), and there you will have an evenly drilled deadeye without spoiling your temper or your eyesight.

" For those having a treadle drilling machine, the process is easy—the best hand-drill to use is one of the archimedian spring return type, requiring only one hand." A.E.

When the deadeyes are completed, strop the necessary number with wire, leaving a loop sufficiently long to project beneath the channel. Place the completed deadeye in the recess left for them at the edge of the channel and secure them all by fastening on the outer beading. Now step the mast and attach a cord (any thin cord) to the mast head by means of a longish loop, stretch down over the deadeye and, keeping it straight, mark on the side of the hull where the foot of the chain plate will come. Thus they will all be correctly " splayed." I should leave the top back stays until the top masts are on and get their position in the same manner. The chain plate should be made of metal, brass or copper and afterwards blackened. It will probably be better to soften up the top ends of the plates to make the hook which will engage the deadeye. Note that some of the plates will take two bolts and others only one. As to how the plates are made, I just cut them out with snips and filed them to shape.

The making of the ordinary blocks can now be

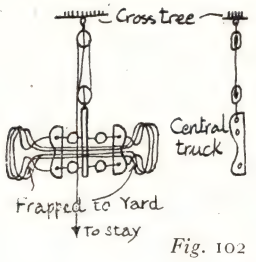


Fig. 102

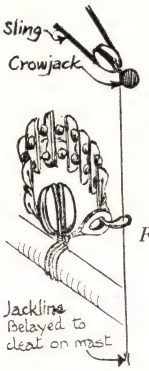


Fig. 103

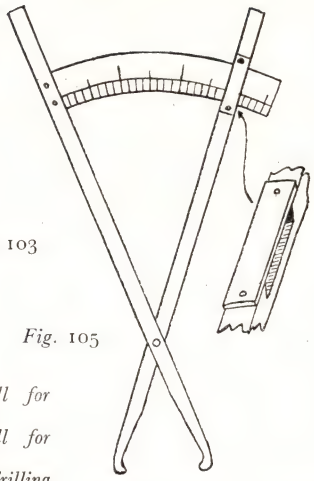


Fig. 105

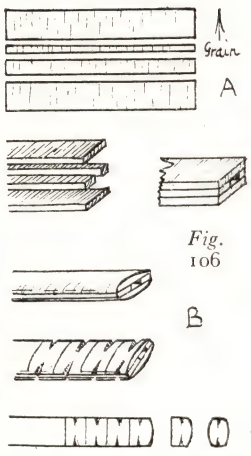


Fig. 106

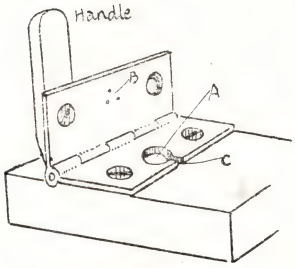


Fig. 102. *Parrell for lower yard*
Fig. 103. *Parrell for lateen yard*
Fig. 104. *Jig for drilling deadeyes*
Fig. 105. *Device for measuring small blocks*
Fig. 106. *Three - ply method of making small blocks*

considered. I am taking it for granted that sheaves will be " included out." But if any modeller does put sheaves in his blocks he has reached the stage when he doesn't need me to tell him how !

For a ship of this size blocks are needed in almost every inch size from 6 in. to 26 in. with one or two even larger. It is possible to cut out all the odd sizes making a ten inch do for an eleven and so on, that is for the modeller to decide, but in the method I shall describe I had no difficulty in making correct sized blocks when each scale inch equalled 1/72 in. actual.

Firstly I made myself a measuring gadget by which it was easy to make such small measurements. With two lengths of brass curtain rail, four rivets and two small pieces of brass sheet I made the instrument shown in Fig. 105. As I have said my scale is the printer's one, 1 em to 1 ft., for the sake of the purist I may add that I am well aware that 72 scale feet is about $\frac{1}{16}$ in. less than an actual foot. So taking advantage of my scale I put a piece of 12 point type between the jaws of my gauge and marked one foot on the scale, and so on. In spite of its Heath Robinson appearance—I count this amongst the most important of my tools, and a definite " must " for modellers. By replacing the holding rivet with a small nut and bolt, different scales can be fitted to make it even more valuable.

This solved the problem of measuring, but what were the proportions of the blocks themselves ? Falconer states that most ordinary single blocks were to the ratio of 2-3-4 with " 4 " equalling the given size. Thus a 16 in. block was 16 in. long by 12 in. wide by 8 in. thick. The thickness was divided (more or less) by three with the central division occupied by the sheave. I know there were a few refinements but I am concerned with model blocks. Larger blocks, say 18 in. upwards, were probably a little thinner to the length. Double blocks simply had another sheave and side division added to a single, and treble blocks yet another sheave and side division, but I should thin down a little the separating divisions of these blocks.

Now for the making. The usual method is a long strip correct to width and thickness, drilled at intervals and parted off. Dr. Longridge's method of using different thicknesses of three ply is perhaps best when sheaves are fitted. I still use the thin ply for very small blocks, say 6 in. to 9 in., for the larger sizes I build my own ply.

Obtain various thicknesses of veneer. The type of wood is not important if the blocks are all going to be painted, if they are to be left natural or varnished then the same sort of wood will have to be used throughout. Otherwise it is the thickness that is important. Suiting the block to the wood, measure the thickness of the wood and multiply by six. In scale inches that is the size block it will make. In a small scale it will also do for the size larger but *not* the size smaller. With a razor blade cut off two strips of veneer the size of the block, across the grain. Cut another a rather full half width and yet another a quarter width. Glue both sides of the quarter strip and stick on top of the full piece to the top, ditto the half strip and stick this to the bottom and then put the other full strip on top. Place in a vice to set. Fig. 106a. A number of these can be done one evening and left in a vice or between weights until the next evening. Sandpaper the tops and bottoms until the strips are correct to size according to your gauge. Then with sandpaper slightly bevel the sides. With a rule mark off the dividing line of each block on both sides and with a small file cut the stropping channel also on both sides (B). Again with sandpaper shape each end and part off (C). The unshaped edge of the block being shaped up afterwards. If the hole needs cleaning out I should wait until after the block is stropped.

If this method sounds complicated I can assure you that it is really quite simple and speedy. I made all the blocks I needed for the *Prince* (about 800) in a week of evenings. *And they were all correct to size.*

I give in table form the number and size of all the blocks needed but don't stint yourself, it is surprisingly easy to lose a few, so make plenty, they will always come in useful. I find the best way to store them is in a " chest of drawers " made with match boxes. My chest is eight boxes high by six broad. I wrote the size on the front of each drawer and used paper fasteners for handles. I recommend this idea for the storing of the many small parts required in ship-modelling.

To be continued

The "A" Class Sharpie

★ and how to build her

"K.N."

BY H. B. TUCKER

WHEN the keel is shaped, but before it is chamfered off to its section, the skeg has to be fitted. The method is clear from Fig. 12. It is most important that the skeg should be vertical, and not lean to port or starboard. Likewise it is important to get the sternpost (back of skeg) vertical, or your rudder will not work properly. The skeg is cut from wood $\frac{3}{8}$ in. thick. With the marking gauge, put two lines $\frac{3}{16}$ in. either side of the centre-line on top and bottom of the keel for the slot. Position the ends, and holding the keel in the vice at the correct angle bore two $\frac{3}{8}$ in. holes to form the ends of the slot. You can either cut out the slot with a chisel or start with a keyhole saw. In the latter case keep well inside your lines and finish with a chisel. When cutting your skeg, you will have, of course, allowed for the part that goes through the keel. The top of the skeg will then assist in getting it in position. Put temporarily in position, and with a set square test it for thwartships alignment. Remove the skeg, and if it has not already been done mark the sides of the keel for planing to section. In this part of the boat take the measurement from Section 9, and remember that there is no $\frac{1}{2}$ in. wide flat bottom to the keel. When the keel has been planed to section the skeg is glued in position. The after part of the keel is then laid aside until required.

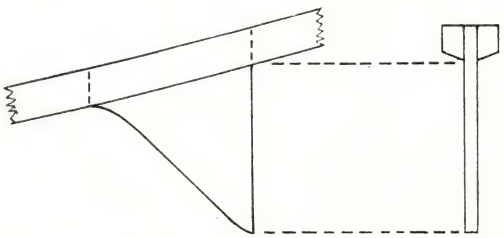


Fig. 12. Fitting the skeg

Since the centre member of the backbone assembly is formed by the top part of the bread-and-butter fin, it may be advisable to deal with the fin as a whole before getting down to details.

The lines drawing which appeared at the beginning of this series was not intended as a plan to work from, but simply to show the lines of the boat, and due to its small scale I omitted the two additional waterlines situated $\frac{1}{4}$ in. and $\frac{1}{2}$ in. respectively above W.L.8. These and other details omitted from the small reproduction, all appear on the full-size drawings. Readers are, therefore, asked to refer not only to these lines, but also to Figs, 5 (pages 60-61 Feb. issue) and 13, bearing in mind that the bottom of the centre member of the backbone falls on W.L.7.

From the bottom of the fin to the top of the keel from its forward end to $\frac{1}{4}$ in. ahead of Section 6 is $8\frac{1}{2}$ in., and abaft this point it is $8\frac{1}{4}$ in. Up to W.L.8 would make eight layers 1 in. thick. Since the top of the lead falls exactly half-way between W.L.s 6 and 7, two $\frac{1}{2}$ in. layers will be used at this point instead of an inch layer, in order to save work when the pattern for casting the lead keel has to be taken off. See also reproduction of lines drawing pp. 60 and 61, February issue.

Hence, when we glue up our fin for carving, we shall only make the lower joints for W.L.s 1-6 inclusive, leaving the joint between the $\frac{1}{2}$-in. layers to be made after the lead keel pattern is taken off. The joint on W.L.7 is never made at all since this is where our detachable keel takes off. The joints for the two $\frac{1}{4}$ in. layers on top of W.L.8 are made before carving the fin.

Now let us examine the structure of the detachable keel (Fig. 13) in detail. This is shown with the joint slightly open. Instead of three or four keel-bolts, only two are used but these are stout. To remove the keel, the butterfly nuts and washers are taken off, and the keel is then free. The locating studs serve to keep the ends of the fin in alignment with the hull.

The contact faces of the removable fin are shod with brass plates held in position with screws as shown. To make room for these plates, the contact faces of the layers on W.L.7 are planed away for the thickness of the brass to avoid increasing the depth of the keel, which would probably put the yacht over rating. The keel-bolts remain permanently in the fin, and brass tubes are put in the hull for them to pass through. Rather hefty screws are put through

Continued from June issue, page 227

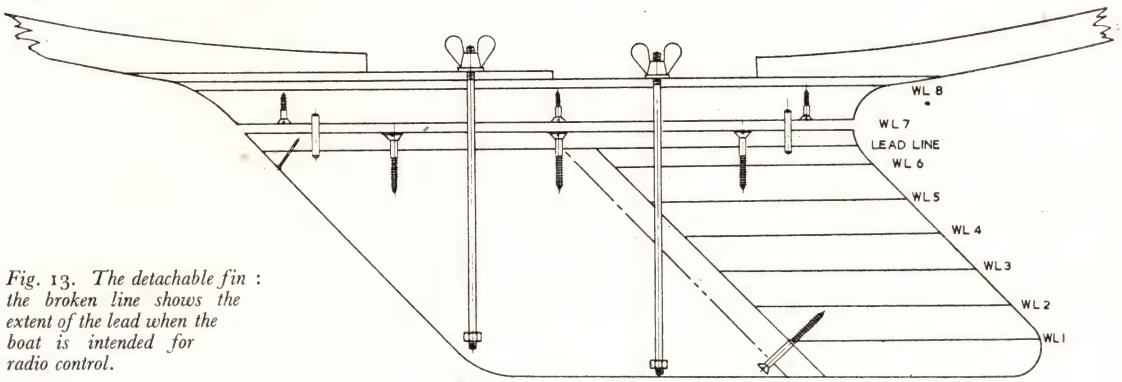


Fig. 13. The detachable fin : the broken line shows the extent of the lead when the boat is intended for radio control.

the lower face-plate as they also serve to attach the lead to the $\frac{1}{2}$ in. layer which forms the top of the detachable fin. The after screw is also large as it serves to keep things together. The locating pin at the fore-end of the lead prevents the lead being bent and keeps it in position. The locating screw at its heel serves the same purpose.

Here is a little way in which we can save labour. Our face-plates will be made of sheet brass approximately $\frac{1}{16}$ in. thick. It makes no difference whether the joint between detachable fin and hull falls exactly on W.L.7 or $\frac{1}{16}$ in. above it. So instead of making the layer between W.L.s 7 and 8 of 1 in. wood, we can put in a temporary layer $\frac{1}{8}$ in. thick and make the permanent layer $\frac{7}{8}$ in. thick. This has the further merit that when our fin is carved and we take out this temporary layer, it can be used as a template to mark out our brass-face plates for shaping.

The wood for the layers has to be marked out. If you are working from your own enlargement from the lines plan published in this magazine (pp. 60 and 61, February issue) you will have to take out the two W.L.s $\frac{1}{2}$ in. and $\frac{1}{4}$ in. respectively above W.L.8. Rule these on to the sheer plan and body plan. The former will give you the position for the ends, and the latter the widths on each section.

Start with the layer between W.L.s 8 and 7. Since W.L. 8 is the larger face, our wood has to be cut to this. You require a piece 21 in. × 3 in. × $\frac{7}{8}$ in. To make a template, take a tracing of the W.L.7, fold up the centre-line and cut out the double thickness, as you did for the moulds. Before attempting to transfer this outline to the wood, the latter must have the basic lines put on it. Run a centre-line down the wood, square this round the ends, and repeat the centre-line on the other face. Mark in your station lines and square these right round the wood. Pin the template on to the wood, taking care to get your centre-line and station lines exactly in position. Run a pencil round the template. With a bow saw, or compass saw (sometimes called a "keyhole saw"), cut out the layer, sawing about $\frac{1}{8}$ in. outside the line. With a sharp paring chisel, trim the upper face back sharp to the marked line, but leave the rest of the carving until later.

As the layer between W.L.s 7 and 6 is made up of two $\frac{1}{2}$ in. thicknesses, screw these temporarily together, square the edges up, and mark in the centre-line and station lines as before. When it comes to making the template, we find from the plans that in the after part, the lower W.L. extends beyond the upper (see Fig. 14). Hence we have to cut our wood to a composite shape. First trace W.L.7, and then transfer the tracing paper to W.L.6 to get the shape for cutting. When actually marking the wood, you have to mark not only the composite shape on the top face, but indicate where the top face ceases to be the larger. On the bottom face you have to mark the shape as well, particularly the part where the lower face is the larger. In trimming to the line, you trim the upper face for the part where it is the larger, and the lower face where this is the larger. The same procedure applies to all the other layers. It should be explained that the object of trimming back the faces to the line is so that you know exactly where the lines fall, and thus have a guide when carving the fin to shape.

The keel-bolts are made from $\frac{3}{16}$ in. diameter brass rod, so holes have to be bored accordingly. These fall half-way between Sections 5 and 6, and 6 and 7. As it would be virtually impossible to drill these accurately after the fin is assembled, the individual layers are separately chilled. Mark the spots on the centre-lines of both faces of each layer. Start by boring about half through the wood from the top face of one layer, turn it over, and bore the rest of the way from the bottom face. The holes should register. Do the same to the other layers. Your holes should now register right through the fin. Test this with your rods.

(To be continued)

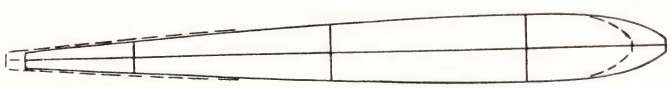


Fig. 14. Plan of layer between W.Ls 6 and 7.

No. 7: THE BURMAH OIL CO. (TANKERS) LTD.

BY LAURENCE DUNN

The photos are reproduced by courtesy of The Burmah Oil Co. Ltd.

ONCE they have made their maiden voyage the ships of the Burmah Oil Co. Ltd. are seldom seen in British waters, or indeed, west of Suez, and it is probably for this reason that so little is written about them in this country. It is a feature of these times that tankers of a given size and age tend to be very similar to one another. This is largely due to the fact that if they are not actually built for one of the giant oil combines, their owners hope to charter them to one of these companies, and so deem it wiser to follow well-tried designs.

The tanker fleet owned by The Burmah Oil Co. is designed to meet this firm's own specialised requirements and over a number of years the Company has evolved a type of ship that differs but little in general layout, yet somehow contrives to present a more original and pleasing appearance. Apart from shape, their colouring also helps to make these ships easy to identify at sea, for they are painted in a colour scheme that is all their own. The black topped funnel is white, as are the superstructure and masts. The topsides of the hull are a cool neutral grey with black beading separating this from the white top strake of the islands. The boot-topping below is a dark brownish red.

Before continuing with the ships themselves it may be of interest to say something about the company that owns them. The original Burmah Oil Company was formed in 1886; reconstituted in its present form in 1902, it has a close connection with the Anglo Iranian Oil Co. Ltd. and has its headquarters in London. As its name implies Burma has played a very large part in the Company's production and refining activities. Up to 1921 when the firm acquired control of the Assam Oil Co. Ltd., nearly all its production of crude oil came from Burma, and 75 per cent. of it was still being produced there in 1942, when the Japanese overran the country. To deny the enemy their use the oilfields and refinery had to be "scorched." After the war reconstruction started, but in 1948 this had to be suspended owing to the control of a large part of the country being lost to insurgents, who unfortunately also occupied the territory through which ran the main pipeline leading to the Rangoon refinery Since then relatively small quantities of oil have been produced in Burma itself. However, in January of this year, to further development in the country the Burmah Oil Co. Ltd., together with two other firms, the Indo Burmah Petroleum Co. Ltd. and the British Burmah Petroleum Co. Ltd. formed a new company. The Union Government also came into this partnership and holds about a one third share in this £15 million venture, which is known as the Burma Oil Co. (1954) Ltd.

Besides these interests and a small oil well and refinery in Assam, the Burmah Oil Co. owns others in India and Pakistan. Notable too, amongst these is a large gas field which has been discovered near Sui. This will be linked by a 350 mile pipeline to Karachi, where it will be used for industrial purposes.

The tanker and general cargo ship "Beme" of 930 tons gross, originally designed as a Fleet attendant for Eastern waters

Returning to the tanker fleet, this includes the following units:

	Burmah Oil Co. (Tankers) Ltd.				
s.s.	Badarpur	Built	1922	8,079	gross
m.v.	Burmah Emerald ...	,,	1952	6,250	,,
m.v.	Burmah Sapphire ...	,,	1953	6,231	,,
m.v.	Burmah Star ...	,,	1953	6,250	,,
m.v.	Yenangyaung ...	,,	1937	5,938	(prev. 5,447)
	Burmah Oil Co. (Burmah Trading) Ltd.				
s.s.	Beme	Built	1946	930	gross

The largest of these, the veteran *Badarpur* is a triple expansion engined ship, built and engined by Hawthorn Leslie & Co. Ltd., and named after a former oilfield in Assam. An expensive vessel for that time, she cost £420,000, but she has proved remarkably successful and reliable in service. As a result of being engaged in the black oil trade she has not suffered from the corrosion associated with white oils. Measuring 454 ft. in length overall × 57.1 ft. in beam, she has a deadweight of 11,700 tons.

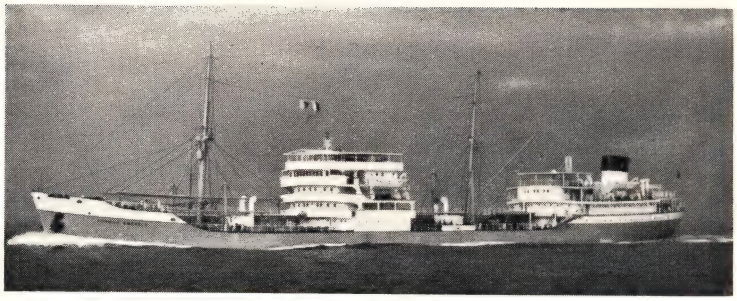
The appearance of the *Badarpur* is somewhat unusual, this being partly due to the bridge being placed exactly amidships, a little further aft than is normal. The result is a very long clear foredeck, broken by a single tall post. Other distinguishing features are the placing of the mainmast close to the poop and the fact that only the after part of this deck is plated to the sides of the hull. Since the photograph was taken the four poles on the bridge have been removed and replaced by radar equipment.

The *Yenangyaung*, named after another oilfield, was the Company's first large motorship. As built by Swan, Hunter & Wigham Richardson Ltd. she measured 400 ft. in overall length × 54.2 ft. in beam. In May 1953, however, she returned to Wallsend for overhaul and lengthening. There she was duly cut in two, an extra cargo tank being built in just forward of the mainmast, increasing her length by about 30 ft. As a result her deadweight capacity was raised from just over 8,000 to 8,700 tons.

The ship returned to service early this year, sailing

Left: M.V. "Yenangyaung" of 5,938 tons gross, the company's first large motorship, after lengthening

Below: M.V. "Burmah Sapphire" of 6,231 tons gross, built 1953



M.V. "*Burmah Emerald*" *of* 6,250 *tons gross completed in* 1952

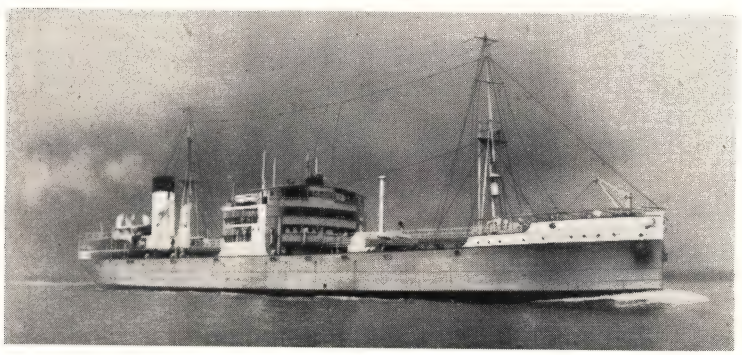
from the Tyne on March 2nd. Her looks have been improved by the added length, and she now has a very graceful appearance. For a motor driven tanker—she has a single Doxford engine, giving a speed of some 12½ knots—her funnel is unusually forward on the poop, while another small feature, not often seen elsewhere is the placing of the after boat on the poop deck, one deck lower than usual.

During the last year or so the Company has taken delivery of three new tankers, which like the others have been designed for the India and Pakistan trade, and to carry several grades of bulk as well as packed oil. On the light draught of 25 ft. made neccessary by the lack of water at Calcutta and Chittagong, they contrive to carry a deadweight of approximately 8,450 tons. The first to be ready was the Cammell Laird-built *Burmah Emerald*, while the other ship from this yard, the *Burmah Star*, together with the *Burmah Sapphire*, built by Swan Hunters were completed last summer. All three have a length o.a. of 434 ft. and a breadth of 56.2 ft. The Tyne built vessel has a Doxford type engine and the other two Sulzer machinery; in each case the speed is 12 knots. These ships can carry up to 12 different grades of oil, small consignments such as special aviation spirit for refuelling points for air-line services being carried in the six summer tanks, which may alternatively be used for bulk cargoes. Besides the rather unusual rake to funnel and masts and the elaborate equipment of derricks and kingposts, other interesting external features are the extra hawsepipes, permanent teak awnings and the large size of the bridge. The accommodation is particularly elaborate and is built around a central well or trunk, which is topped by a large exhaust ventilator, which may be seen at the top of the bridge.

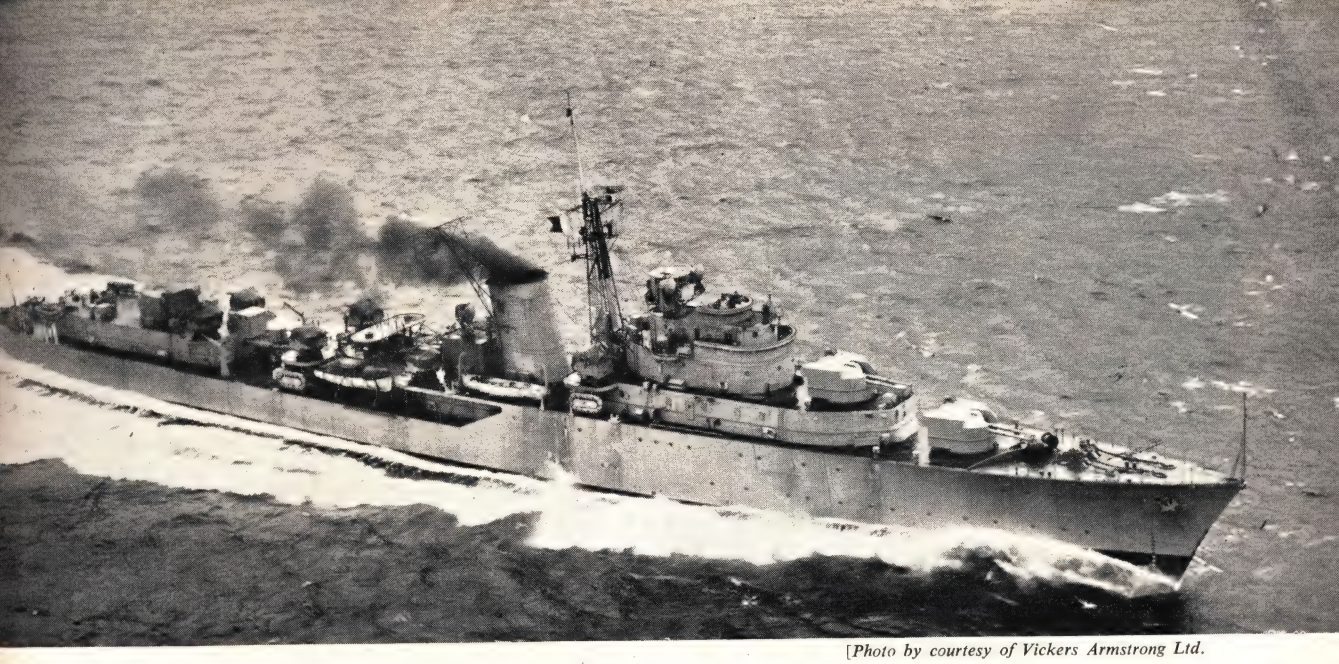
The little *Beme*, which bears the name of a Burmese village, is based on Rangoon and operates to the four Burmese ports of Akyab, Moulmein, Tavoy and Mergui. She carries only a small amount of bulk oil, most of her cargoes consisting of packed products. Originally named *Empire Tesdale*, she was built by Swan, Hunter & Wigham Richardson Ltd. in 1946. Measuring 201.2 ft. o.a. × 34.2 ft. beam, she was one of a series of steam and diesel driven vessels designed for use in Far Eastern waters as Fleet attendants. The *Beme* was extensively damaged by fire in 1951, when lying at Moulmein and had to have a very thorough reconstruction at Calcutta. One external change resulting from this was the fitting of cross bracing to the after kingposts and the addition of a main topmast.

Some readers may notice that no mention has so far been made of the steamers *Masimpur* and *Singu*. The former, a ship of 5,586 tons and built 1927, was sold during the summer of 1952, to become the Panamanian owned *Georgia*. The 4,917 ton *Singu*, built four years later, however went to British breakers whne disposed of last August.

At the end of 1952 it was announced that the Burmah Oil Co. (Tankers) Ltd. had ordered a further oil tanker, from Vickers-Armstrong Ltd., of Barrow. It was then described as being by a large margin the greatest motor driven tanker yet ordered in Britain. This vessel will have a deadweight tonnage of 32,000 and be powered by a single Vickers-Doxford engine of 8,000 b.h.p., which will give a service speed of 14 knots.



S.S. "*Badarpur*" *of* 8,079 *tons gross, built in* 1922



[*Photo by courtesy of Vickers Armstrong Ltd.*

Naval Photograph Club

BY P. A. VICARY

VENEZUELA has increased her naval strength by having three large destroyers built by Messrs. Vickers Armstrongs at their Barrow Yard. This little South American Republic has, until, recent years been content with a few gun vessels and six ex-Canadian corvettes (frigates). These new destroyers have a displacement of 2,600 tons, and mount six 4.1 in. guns in three turrets, two forward and one aft. They are some 200 tons larger than our " Battles " which mount four or five 4.5 in guns, and have a very pleasing profile not unlike our " Battle " class. The general arrangement of these Venezuelan destroyers will be seen from the photograph of the *Nueva Esparta* on trials. There is a long fo'c'sle brought well aft of the bridge, with twin super firing 4.1 in. guns in two turrets forward, and two 4.1 in. guns on the after shelter deck, eight 4.0 mm. A.A. guns, are in single mounts and a set of triple 21 in. torpedo tubes amidships. They have a lattice mast and a large funnel placed well aft of the bridge to eliminate gases from the furnaces. The *Nueva Esparta* attained a speed of over 31 knots on trials with 35,000 s.h.p. and proved a very good sea-boat. Her sister ship the *Zulia* was launched in May 1953, and the *Aragua* has been laid down. For comparison see photograph of the " Battle " class destroyer *Finisterre*.

The Ansaldo Yard at Genoa are building three smaller destroyers for Venezuela These are of 1,150 tons each, and it is understood that three more are on order. These vessels will carry four 3.9 in., four 40 mm., and eight 20 mm. guns with three 21 in. tubes, two " hedgehogs," four mortars and two depth charge throwers. They will have a flush deck and a large cone shaped funnel.

The cruiser *Nigeria*, 8,000 tons, has been sold to the Indian Navy and will be refitted in a British yard by the Indian Government. The *Nigeria* is the only vessel of her class to retain the triple turret in " Y " position, and has been in reserve at Rosythe.

The ocean minesweeper *Brave* has been renamed *Satellite* and will serve as an R.N.V.R. tender.

The Tank Landing Craft Mark VI, which are serving in the Rhine Squadron have been given names, to make it more interesting for those serving in them. Two of them are named *Dinosaur* and *Brontosaurus*.

Top : *The Venezuelan destroyer " Nueva Esparta "*

Right : *The Battle class destroyer H.M.S. " Finisterre "*

RADIO CONTROL NOTES

A series of articles for the modeller with an interest in remote control of his craft

By G. SOMMERHOFF

Author of "Radio Control of Model Aircraft," Percival Marshall, price 9s. 6d

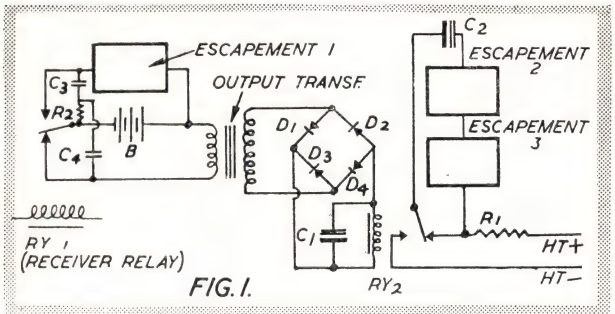


FIG. 1.

Fig. 1.
C_1=20 *mfd*, 12 *v wkg.*
C_2=50 *mfd*, 50 *v wkg*, (*B.E.C. type* 71443)
C_3, C_4=0.1 *mfd.*
R_1=33,000 *ohms.*
R_2=15 *ohms.*

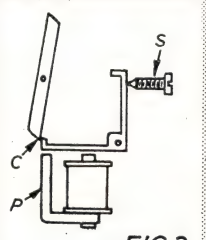


FIG. 2.

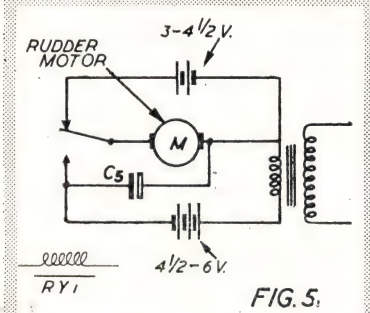


FIG. 5.

A SIMPLE SYSTEM FOR THREE CONTROLS

WHEREAS in the control by radio of model aircraft the best advice for the beginner is to start with no more than one control and most modellers are content to carry on with a single control for quite a time, this is not so with radio control of model ships. The hazards here are not the same and they are no greater for three controls than for one. Right from the beginning therefore the modeller is on the lookout for multi-control systems. And this adds greatly to the hobby; for there is no doubt that the design of multi-control systems offers the greatest scope for ingenuity and invention. And it is great fun. The challenge here, is the resonant reed control system, i.e. the rather expensive and complex, but dignified and orthodox, method of controlling a number of functions by means of a corresponding number of resonant-reed switches which respond to signals of different modulation frequencies. In how much simpler and cheaper a manner can we get the three or more controls which we want in our model ship ?

At regular intervals modellers come up with new schemes and new tricks to meet this challenge and this, more than any other factor, has given colour and interest to the movement during the past few years.

Here is another such scheme. It gives three controls, although they are not entirely independent: you can move escapement 2, without moving escapement 3, but not vice versa.

The steering of the model can be done either through an escapement (sequence control) or by a pulsed motor (progressive control). For simplicity we shall at first assume that the former method is used (escapement 1 in Fig. 1).

Escapement 2 can be used to control the ship's main engine while in an electrically driven ship, the third escapement can be used to switch the current supply from the main engine over to various subsidiary engines in turn. Thus we can get sequence control over the anchor, the launching of a pinnace (see our May issue), the hoisting of a signal, etc.

The intergear of the present system is shown in Fig. 1. It is designed to operate in conjunction with a standard single-valve receiver. Only the sensitive relay (Ry 1) of this receiver is shown in the illustration.

The system functions as follows. At a transmitter signal the sensitive receiver relay Ry 1 drops out and energises escapement 1. This escapement works our

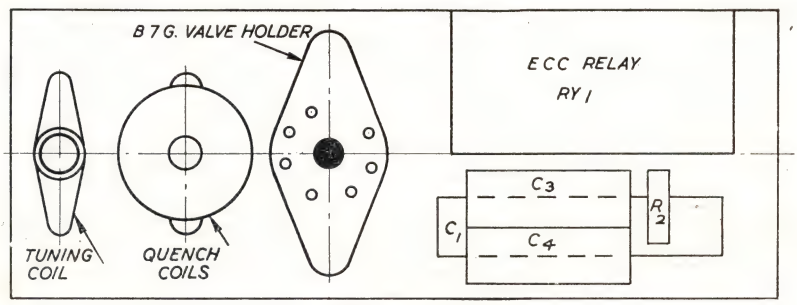


FIG. 3 FULL SIZE

rudder through an ordinary crank and slot drive.

To actuate escapement No. 2, or No. 2 and No. 3 together, the transmitter is pulsed with a fast pulse of very low mark/space ratio. Owing to this low mark/space ratio and owing to the impedance of the escapement coil, such a signal remains without effect on escapement 1, but the fast pulses set up an a.c. voltage in the secondary of the transformer. This a.c. voltage is rectified in a full-wave rectifier consisting of four Germanium Xtal diodes and excites the relay Ry 2. This relay pulls in and causes the electrolytic capacitor C2 to charge up from the h.t. supply. At the end of the signal Ry 2 drops out again and discharges C2 through *both* escapements 2 and 3.

Now by a simple modification of the type shown in Fig. 2 one of these escapements (3) has been given a variable sensitivity. The lug which normally acts as a stop to the returning claw has been replaced by a screw S, and by means of this screw the airgap between the claw C and the pole-piece P can be varied. The greater this airgap is, of course, the less sensitive the escapement. The power of the discharge of C2 through the escapements depends on how far this capacitor was charged; and this in turn depends on the length of the charging time, i.e. on the length of the pulsing transmitter signal. It is quite easy to adjust the variable escapement in such a manner that a pulsed signal of, say, 1 or 2 seconds, causes escapement 2 only to pull in when Ry 2 returns, whereas a pulsed signal of 4 or 5 seconds pulls in both escapements.

The dimensions of the transformer are important. The one used with success in the writer's apparatus was a miniature output transformer with 5 ohms on the one coil and 8,000 on the other. You have to remember, of course, that we are using the transformer in reverse: the coil labelled " primary " on the transformer is our secondary.

C1 is a small smoothing capacitor of 20 mfd., 12 V wkg. Its function is to suppress the single pulse which is generated in this network every time a continuous transmitter signal stops or starts. R2, C3 and C4 form a spark-suppressing network. B has $4\frac{1}{2}$ volts. (C3, C4=0.1 mfd. R2=10 ohms.)

The quality of C2 is important. The writer has obtained the best results with B.E.C. type 71443 capacitors of 50 mfd., 50 V wkg. But some modellers may prefer 100 mfd. here.

Not all escapements are equally suitable for being actuated by capacitor discharges. The inertia of the escapement has some part to play in this. The writer has had no encouraging results in this respect with so-called miniature or compound escapements. In fact the only escapement he can confidently recommend for this particular circuit is the full-sized E.D. standard escapement.

The hard-valve receiver used in the prototype was an ECC receiver. The components of this receiver were transferred *en bloc* to a larger paxolin panel which also carries the transformer, rectifier and the second relay. The layout adopted is shown in Fig. 3 (from below) and Fig. 4 (from above).

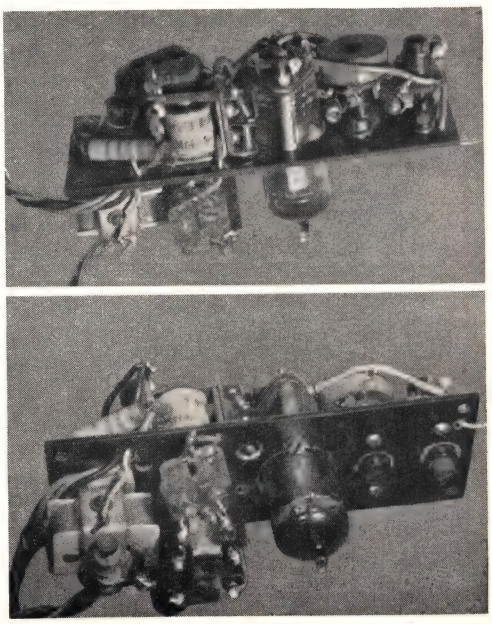
The circuit shown can be easily modified for modellers who prefer a positional rudder control to a sequence control. One or two methods of obtaining such control with the aid of a small electric motor which is pulsed by signals of varying mark/space ratio were discussed in our February notes. (Incidentally in Figs. 1 and 2 of those notes one set of battery connections was inadvertently shown with reversed polarity—for which the writer apologises.)

The basic modifications required are shown in Fig. 5. The electrolytic capacitor C5 serves to smooth away the voltage pulses created by the rotating motor. These will otherwise set up an undesirable a.c. voltage in the secondary of the transformer. In conjunction with the Frog " Tornado " motor used by the writer 250 mfd., 25 V wkg., proved to be the best value for this capacitor, but other motors may require different values.

Since a fast pulse operates our 2nd and 3rd controls, the slowest practicable pulse should be used for pulsing the rudder motor. The fast pulse for the secondary controls must now, of course, have a mark/space ratio of approximately 50/50, so as to keep the rudder motor stationary while the secondary controls are being energised. During the experimental stages,

Upper : *Receiver as seen from above*

Lower : *Receiver as seen from below*



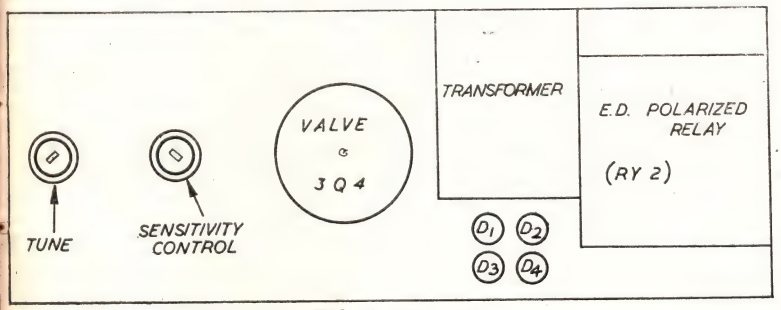


FIG. 4. FULL SIZE

a milliammeter should be inserted in series with Ry 2.

Since one of the two batteries (Fig. 5) has to drive both the rudder motor and the transformer, this should be given a higher voltage.

NEW G.P.O. REGULATIONS FOR RADIO CONTROL

June 1st saw the full implementation of the Wireless and Telegraphy Act of 1949. Unfortunately this has meant the end of licence free transmissions for radio control of models. However, the new licence regulations are not very severe and there is no need for modellers to be downhearted about the change. A licence permitting transmissions on the same two wavebands as before will be issued to any member of the public who applies in writing to :—Radio Branch, Radio and Accomodation Dept., G.P.O. Headquarters, London, E.C.1, and encloses a fee of £1. This fee is merely designed to cover the administrative cost of the licensing scheme and is payable every five years, so that the average cost of the licence works out at only 4s. per annum. When applying for the licence the modeller should also state the locality at which he intends to operate his station. The licence is only valid for a station operating within five miles of this registered address. But if at any time the modeller wishes to operate his station at any other locality it will suffice if he gives previous notice in writing to the local telephone manager. For contests collective notification may be given by the contest organisers.

In drafting these regulations the G.P.O. authorities have been very co-operative and, at the instance of representatives from the movement, have made several important modifications. It is therefore in the interest of the whole radio control movement that modellers should reciprocate in the same spirit of co-operativeness and should observe strictly the limitations imposed upon their equipment by the licence. Above all, this means that the transmitter output should not exceed the limits stated on the licence form, and that its frequency should be kept strictly within the allotted wavebands.

We shall return to a discussion of the new regulations in one of our future issues when we have had more experience of how they will work out in practice. Meanwhile our readers may rest assured that the Post Office authorities will be very understanding in enforcing the new regulations and in any bona fide case, will give a reasonable period of grace to the modeller. We have already been assured that there is no need to modify existing equipment for the coming contests.

To be continued

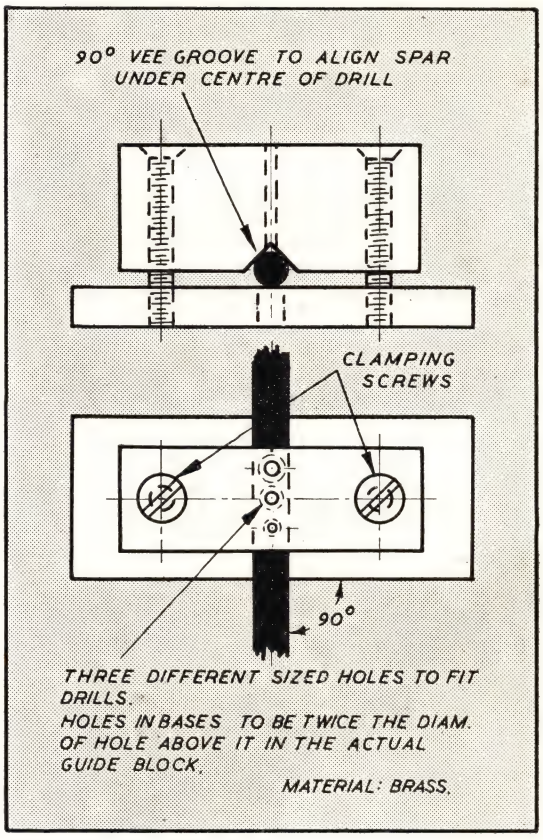
10/- hints...

A SIMPLE JIG FOR DRILLING MODEL MASTS AND SPARS

*Have you ever had trouble in drilling small holes through masts or spars whilst constructing a ship model * If so this month's 10s. hint which comes from Mr. A. W. Purchas of Bishop Stortford should be of special interest to you.*

Mr. Purchas sent in a diagram (opposite) of his method of dealing with this operation and we are happy to pass it on. As the diagram shows he has made a two-piece brass jig in which three different sized holes have been drilled. The holes in the base plate being twice the diameter of those in the top guiding block. When a hole is needed the spar is clamped firm and rigid between the two pieces of the jig by means of the two clamping screws and the whole jig is the placed in a vice for drilling—thus avoiding any splits or accidents that can occur in a normally delicate task.

If you have a hint or idea of your own which has made a tricky modelling job easier, why not share it with fellow modellers, "Ships and Ship Models" offers 10s. each month for such ideas which should be addressed to The Editor, Ships and Ship Models, 19-20, Noel Street, London, W.1.


90° VEE GROOVE TO ALIGN SPAR UNDER CENTRE OF DRILL
CLAMPING SCREWS
90°
THREE DIFFERENT SIZED HOLES TO FIT DRILLS.
HOLES IN BASES TO BE TWICE THE DIAM. OF HOLE ABOVE IT IN THE ACTUAL GUIDE BLOCK.
MATERIAL: BRASS.

The Thames ★ PLEASURE STEAMERS

PART ONE
BY
OSCAR E. SEYD

P.S. "Royal Eagle" steaming full ahead at sea

THE liquid history attributed to the river Thames must have been much enhanced by the activities of the General Steam Navigation Company. For over a hundred years this company has maintained a summer service of pleasure ships on the London river. For the same period it has provided all-the-year-round commercial services to ports on the continent of Europe, and elsewhere. It is the oldest sea-going steam ship company in the world. Today it has the largest short-sea cargo trade between England and European ports. More "General Steam" ships, as they are popularly called, use the port of London each year than those of any other company. These are just plain facts. A degree of romance is associated with a 130 years or so of very practical G.S.N. enterprise, but the equally practical consideration of available space excludes any such nostalgic reference from this article.

To record, also, the international services of G.S.N. ships during the two world wars is a story for another occasion. It is full of thrills, and tells of much vital service valiantly rendered by gallant merchantmen, and by the pleasure fleet designed for very different duties in times of peace. The ten years or so of war service are additional to the century of peaceful trading with which this veteran company is now credited.

Right from their establishment in 1824 the pleasure ship services were a vital part of the "General Steam" undertaking, and they are still so regarded. They have not always been run at a substantial profit, differing demands and changing money values making their financial value at times an open question to certain people. But tradition has been strong in the "General Steam," and there is no question of the social and national value of the enterprise which for over a century has provided generations of happy passengers with enjoyment and recreation on the waters of Father Thames, and at the nearby pleasure resorts to which they lead.

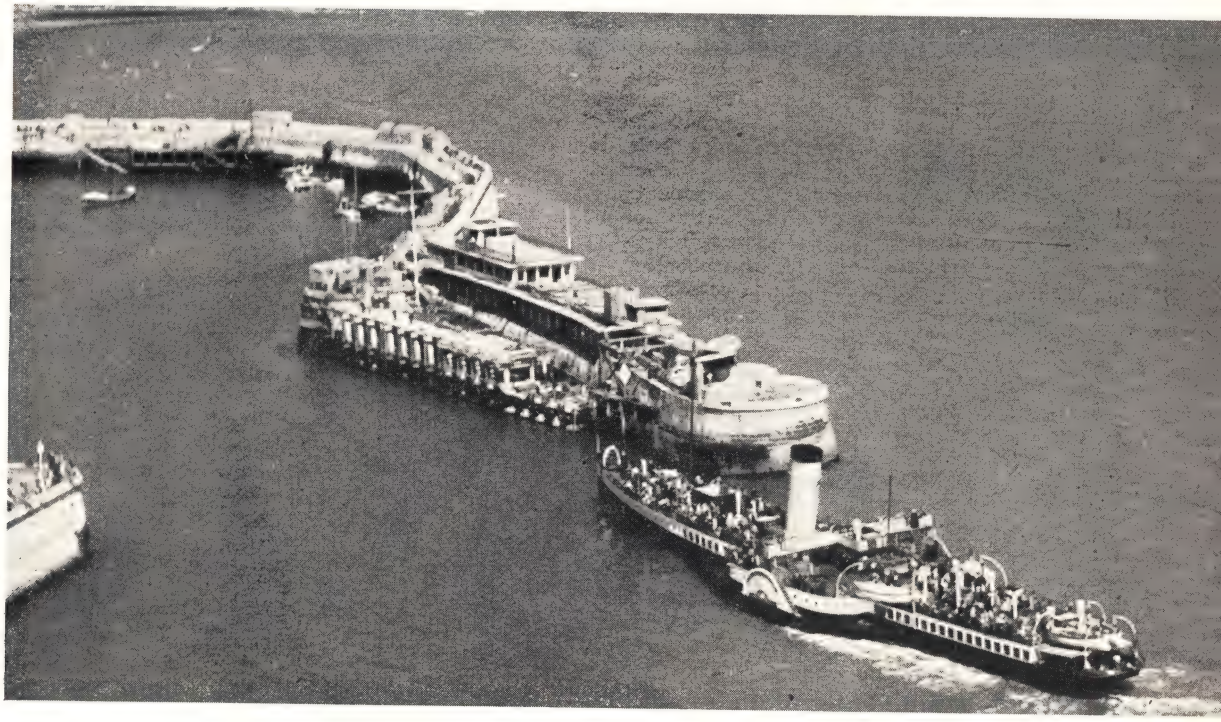
For this season the Thames pleasure ships offer a continuance of day cruising attraction, enhanced by the resumption of Continental trips, with landing for three hours at the French port of Boulogne.

Technical progress has brought changes in the G.S.N. pleasure ships. Until 1936 the steam paddle. ship was supreme. But in 1937 a motor driven vessel appeared, the first *Queen of the Channel*, and this type has since almost eclipsed the long-loved paddler. Enthusiasts for the paddle steam ship may regret its passing romance, and the loss of such interests as the majestic and easily viewed paddle engines. But there is no doubt that the highly developed motor ships now on the Thames pleasure service are very efficient. They offer characteristic advantages. They are splendidly equipped from the viewpoints of safety, easy handling and passenger comfort. In them such luxuries as radar, ship-to-shore radio telephone, and very extensive electrical services are now installed.

A very full programme has been arranged for the 1954 season, including the runs across the Channel to Boulogne. Actual sailing arrangements can be ascertained from the General Steam Navigation Co. Ltd., 15, Trinity Square, London, E.C.3.

It is interesting to imagine the conditions which prevailed in the early years of the "General Steam." A comprehensive sailing programme issued for year 1826, for instance, advertises: "Boulogne in fifteen hours. The *Rapid*, Captain Jennings, every Tuesday and Friday, returning every Sunday and Wednesday. Chief Cabin 37s. Fore Cabin 26s.

Carriages four wheels £4 10s., two wheels £3. Horses £4. Dogs 5s. each." Of the voyage to Rotterdam "in twenty-six hours by the *Belfast*, Captain Roberts," it is said : "sails from off the Custom House or Tower, London, every Saturday morning at nine o'clock, returning every Tuesday at ten. Chief Cabin £2 10s. Fore Cabin £1 15s. Horses £6 6s. Dogs 10s. Carriages £6 6s. Chariots £5 5s. Gigs £3 3s. Freight on merchandise by agreement. On arrival of the packet at Rotterdam a diligence is in readiness to convey the passengers to the Hague." Even on the first paddle steamers to Margate and Ramsgate comprehensive arrangements were made. For Margate they left London "every morning at nine o'clock, Sundays excepted," and for Ramsgate "every Wednesday and Saturday morning at eight o'clock. Season tickets £3 3s., with the privilege of the Ramsgate or Margate Packets, may be had of the Captains on Board. Chief Cabin 12s. Fore Cabin 10s. Children under twelve years, and servants attending families 6s. each. Refreshments may be had on board. All the Packets have elegant state cabins for the ladies, and female attendants." As the



ships were usually filled to capacity, the masters, officers and crews of the little paddlers must have had a busy time in 1826.

The history of the "General Steam" pleasure and commercial services to coastal and Continental ports embraces practically the whole evolution of paddle steamers. In later years it is marked by some of the principal developments in screw steam ships, the introduction of well-proved motor ships, and progress in marine engineering and communications generally. It provides, in fact, a virtually complete exemplification on a small scale of the evolution of sea going power driven craft over nearly its first century and a half.

Although this article is mainly concerned with the pleasure services of the Thames, it is interesting to recall broadly the early enterprise of this Company, and to mention some of its pioneer ships and services.

The pleasure services started with the wood built paddlers, *Lord Melville* and *Earl of Liverpool*, which in the summer of 1824 ran daily from London to Margate and Ramsgate. Almost simultaneously cross-channel cruises to Calais and Boulogne were inaugurated, with the first *Eagle*, the *Royal Sovereign* and the *City of London*. This being before the opening of a railway between London and Scotland, the passenger and cargo service to Leith soon became popular. It was provided by the *Soho* and other pioneer paddlers, the *Soho* being transferred in the early thirties of last century to the newly opened service to Antwerp. This service started, incidentally, thirteen years before there was a steam locomotive on a Continental railway. As early as 1826 several "first class and powerful steam packets" provided regular all-the-year-round passenger and cargo services to Rotterdam (P.S. *Belfast*. Captain Roberts), Hamburg (P.S. *Sir Edward Banks*. Captain Howlett), Ostend (P.S. *Earl of Liverpool*. Captain Peake), Boulogne (P.S. *Rapid*. Captain Jennings), Calais (P.S. *Attwood*. Captain Stranack), and Lisbon and Gibraltar (P.S. *George IV*. Captain Black; and P.S. *Duke of York*. Captain Mowle). For the convenience of passengers who could not

Left : *P.S.* " *Golden Eagle* " *entering Ramsgate Harbour*

Above : *M.V.* " *Crested Eagle* " *cruising in the Thames Estuary*

embark at Deptford, the Lisbon and Gibralter ships called off Brighton and at Portsmouth. These foreign services were all provided by G.S.N. steamers some years before there was anything practical in the way of railways on the continent of Europe. Extensions were subsequently made to some Mediterranean ports. Early G.S.N. ships also voyaged to Africa and India, but short-sea routes were soon confirmed as the Company's true vocation.

That all this was done to a regular schedule well within the first half of last century, and that even the earliest sea-going paddle steamers had an excellent reputation for reliability and freedom from mishap, is a tribute to the first organisers and sea and shore staffs of which the present day General Steam Navigation Company may justifiably be proud. They retain today the team spirit which has pervaded directors and staff from the first, and there are records of people in all grades spending their whole working lives in the service of the " General Steam."

The early paddle steamers were, of course, very different from any within living memory. The first *Eagle*, for instance, had a funnel nearly as tall as her two sail-bearing masts. It was placed between them, just aft of the paddle boxes; these being well forward, elaborately decorated, and bearing in large painted letters the inscription, *Eagle Packet*. Such were distinctive features of the first sea-going paddlers. But the ships soon increased in size, and rapidly showed big developments. The *Monarch*, for example, which the Company placed on the London-Edinburgh service in 1833, was of 1,200 tons gross tonnage, was 200 ft. long and had a beam between the paddle boxes of 37 ft. She was described by the Press of the day, as being " larger than any of H.M. frigates, and longer than the 84-gun ships. The accommodation below is so extensive that she will make up 140 beds, and 100 passengers may conveniently dine in her saloons." In 1837 the Company made history by having built by John Laird, at Birkenhead, the *Rainbow*. This was the first iron sea-going steamer ever constructed. Her internal design showed a big advance on previous practice. She had six watertight bulkheads, was schooner rigged, and her steeple engines of 90 nominal h.p., were designed by David Napier, and built by G. Forrester & Co., of Liverpool. The cylinders were of 50-in. bore and 54 in. stroke, and their connecting gear to the 21 ft. 6 in. feathering paddle wheels towered above the deck. With an average speed of 12 m.p.h. *Rainbow* was then the fastest vessel afloat. The reliability of compass working in an iron ship was first demonstrated in *Rainbow*. She gave 44 years of reliable service, first on the London-Ramsgate run and then on the Continental services to Antwerp and Rotterdam.

The elegant *Trident*, was probably the finest sailing-auxiliary paddle steamer of her time. She had three masts, was schooner rigged, with tall topgallant masts, and a high-steeved standing bowsprit. Her bows had a long sheer, and her overhanging stern was square and elaborately carved. In September, 1843, Queen Victoria and the Prince Consort chose to return from Edinburgh to London in her rather than in the royal vessel which took them to Scotland.

Another very notable G.S.N. ship was the *Little Western*. Built at Bristol in 1841, she was a composite construction of iron frames and wooden planking. After an amendment of the original double-beat steam distribution valves of her two 90 h.p. beam engines to the sliding type, and the installation of tubular boilers in place of the original two-flue boilers, in 1844, she did outstanding service on the London-Ramsgate run, being for a long time the most celebrated passenger steamer on the Thames.

(*To be continued*)

Paints for the model maker

BY VICTOR SUTTON

IN visiting exhibitions I have been impressed by the fact that many good model-makers seem to spoil models by the application of the wrong paints. Much of this fault is because they overlook the use of the many varieties of paints, varnishes and colours available in the good class art and craft shop. Here you have a wealth of shades not commonly used in the normal model-making field. Ships are exceptionally colourful and each company may have its own particular shade—even below water-line !

Paints and similar articles in the art and craft section are always available in very small tubes or bottles and, most important to the ardent model-maker, they mostly mix to get just that correct shade. Also, they are of the very best quality, and explicit instructions are always available in leaflet form or on the bottle. For art and craft work only the best is good enough, and that applies to our craft of model-making.

Crusoe art enamels are available in ½ oz. bottles. The range here in full is white, cream, primrose, orange, pink, bright red, turquoise, new blue, royal blue, pram blue, light green, mid green, deep green, grey, oak, maroon, chocolate, dark oak and black.

In the case of " Thistle " brand this should appeal to ship modellers because it is heatproof and waterproof. It is made up in handy 2½ oz. tins. The range is equally good in white, ivory, biscuit, primrose, shell pink, signal red, golden brown, pastel blue, eau-de-nil (better known as light green), pea green, bright green, silver-grey and black. These are mediums used in pottery painting, so it is obvious that they can be used on a range of assorted materials such as is often used in model-making.

For cleaning up brushes and rubbing out where any mistake has been made one can use " Crystyl " thinning medium which is obtainable in 1 oz. jars.

Many good uses can be made of artists' water colours such as those produced by Messrs. Winsor & Newton, Reeves and others. Here you have an enormous range in tube and pan and even half-pan. Some shades are proved permanent colours and this is mostly denoted on the tube. Some are transparent and semi-transparent and therefore very useful where you wish to get coloured windows and could not use the normal oil paint. The series of colours made specially for model makers by Reeves & Sons Ltd., should by no means be overlooked.

In this range you have permanent Chinese white which can be used for getting a basis for a scenic background to show off ships at exhibitions. This has a good covering quality and will not " pull off " when you apply the next coat, which may be in another colour. If you do quite a lot of modelling then the pot is most convenient but keep it well screwed down when not in use.

At an art and craft exhibition I quite accidentally ran across the use of designer's superfine Gouache water colour and have tried this on small models to good advantage. When thinned with water this can be used through the air-brush and I have used it well with ruling and lettering pens. This is most useful to the ship modeller where the neatness of lines is part of the success of the job. Even and consistent washes free from any granulation or odd blobs can be achieved more easily with this variety than with any other known medium. There are at least 34 shades in the small tube, but jet black and permanent white can also be had in larger tubes.

Most models get photographed at some time or other and if anything brings out the weakness in painting it is the modern camera. Therefore, another of the range which will interest builders of water-line ship models is process black. This contains no blue and photographs perfectly black and, diluted with water, you can get the greys you really need for your tone. Process black is available in ½ oz, 1 oz. and 10 oz. glass pots. This can also be worked through the air-brush.

On ship models, much of the upper structure may be in light wood and card. This is where waterproof showcard colours can be used to advantage. They are supplied in 1 oz. screw-top glass pots, and this medium will resist weather conditions even when models are used out of doors. I use the colours with a little water but this is a matter of personal choice, but it does fill up some of those little crevices where one cannot get with plastic wood. These colours can also be used on celluloid. Take care of brushes and always clean in tepid water after using.

There is quite a fine range of these shades and as all are intermixable you have the advantage of getting just what shade you want. The colours are as follows :—lemon, deep yellow, orange, cobalt; ultramarine, violet, emerald, dark green, brown, vermilion, brilliant red, crimson, white, black.

These paints also work well on celluloid. An interesting point for ship modellers is that superstructure lines can be added in place of cardboard cut-out or thin strip wood which may, in any case be too heavy. With a steady hand and a good thin brush one coat can be added to the first and give the impression of the thickness of framework. I have tried this out even up to three layers and the effects are very good and certainly clean in finish.

MERCHANT SHIPS : BRITISH BUILT, 1954 Volume

Compiled by the publishers, with introduction and section reviews by A. C. Hardy, B.Sc., M.I.N.A., and section nine by Laurence Dunn. Published by Adlard Coles Ltd., Southampton, 25s. net.

This is the second volume of this rather unusual book, the first being that published last year describing ships completed during 1952. Only ships of 300 tons and over are included. As might be expected the largest section in the book is that which deals with tankers. Not only are the numbers of tankers increasing but they have increased enormously in size during the last few years. Whether the 33,000 tons of *World Enterprise* represents the limit or not it is difficult to say, but the feeling is growing in some quarters that for various reasons it might be unwise to concentrate such a vast quantity of fuel in one ship. With passenger liners, on the other hand, the tendency seems to be to build smaller ships. There is no prospect of any more " Queens," even for the North Atlantic run, and on other routes 20- to 30,000 tons seems to be the limit. The new Greek liner *Olympia* is dealt with in considerable detail, profile and deck plans being given as well as photographs of the passenger accommodation. The Bergen liner *Leda* is similarly dealt with, and there is a fine photo of the new Olsen liner *Braemar* with her graceful hull and streamlined funnel and superstructure. The cargo liners range from the New Zealand Shipping Company's *Otaki* of 12,750 tons deadweight down to the motor ship *Tern* of 760 tons deadweight built for the General Steam Navigation Co. Profile and deck plans of *Tern* are given, and this ship would make a working model of a really smart ship. There are a number of interesting prototypes for models in Section 8, which includes trawlers, pilot vessels and tugs. Comprehensive plans of the motor research trawler *Sarsia* are given, and excellent full page photos of the 804 ton steam trawler *Northern Crown* and motor trawlers *Ben Lui* and *Princess Anne* of approximately 500 tons each. The pilot tenders *Wynna* for Melbourne and *Edmund Gardner* for the Mersey, would also make grand working models. In fact the impression left by the book as a whole is surprise at the number of handsome ships of various types which are being produced at the present time, and what a wealth of material they provide for the model maker. The book concludes with a chapter on the Recognition Features of the New Ships by Laurence Dunn, and a very useful table giving dimensions and leading particulars of all the ships built in 1953. With its 92 pages of photographs, and its convenient arrangement, the book will be a valuable addition to the model maker's library.

CORNISH HARBOURS

By Roland Roddis. Published in 1951 *by Christopher Johnson, London,* 10*s.* 6*d. net.*

This was the first of the new popular series of books on South Country Harbours. Perhaps the book should have been written by a Cornishman, but althouth the author cannot make that claim he was for several years Chief Port Executive Officer and Town Clerk of Penryn, and it is obvious he has lived long enough in the county to get to know its people and to appreciate its beauties and its history. The author has an easy style and leads on the reader from place to place, entertaining him the while with information, both historical and topical, in a most fascinating manner. Beginning with Looe we are taken round the coast through Fowey, Falmouth, Mounts Bay, St. Ives, Newquay and on to Boscastle, calling at all the little harbours and, in some cases, places where there is now scarcely any harbour at all. For instance in Helford River we are taken to Gweek and learn that this was probably the place where the Phoenicians came in search of tin, and that there is evidence that as early as 450 B.C. there was a flourishing tin-trade between this part of Cornwall and the Hallstratt civilisation of Northern Spain. This is the kind of thing that crops up throughout the book and makes most interesting reading. The author also has the knack of meeting old characters and getting them to talk, and the covnersations give additional colour to the book. The illustrations, in addition to a useful map of the county, comprise 23 lovely photographs reproduced in photogravure. The book is well produced and will be treasured by the many, both residents and visitors, who love Cornwall with its fascinating coastline and its interesting seafaring life.

DEVON HARBOURS

By Vernon C. Boyle and Donald Payne. Published in 1952 *by Christopher Johnson, London,* 15*s. net.*

This book is a joint effort, the chapters on the south coast being written by Donald Payne and those on the north coast by Vernon C. Boyle. The illustrations consist of 15 photographs taken by Donald Payne and 8 line drawings by Vernon C. Boyle. By means of this combination the publishers have produced a book which is based on sound historic and intimate present-day knowledge, and one which will be valued by the multitudes who know and love Devon whether as residents or visitors. One was surprised to read that Exeter had a seaborne trade, pre-war, of more than 50,000 tons of general cargo per year. The story of how the building of a weir at Topsham in the 13th century completely cut off Exeter from the sea, and of how in 1560 a canal was made from Topsham to Exeter—the first ship canal in this country—which restored her status as a port, is most interesting, and explains much of what we had been but vaguely conscious of before. Similar interesting historical facts crop up throughout the book. Teignmouth with its wide sheltered river is now a prosperous port, with a long history dating back certainly to the thirteenth century and possibly to a.d. 800. Brixham is the subject of a very interesting chapter, which deals with its past history and the story of its fishing. We are told that in 1785 there were close on eighty trawlers working out of Brixham, and that by 1863 there were 152 Brixham-owned trawlers in operation around the British Isles. The chapter on the harbours of the Dart is followed by chapters on Salcombe and Plymouth, and then we are transferred to the North Devon coast to study the harbours of Bideford, Appledore, Barnstaple and on to Ilfracombe and to Lynmouth, with their stories of dwindling fishing fleets and diminishing coastal trade. Enough has been said to show that the subject has been dealt with very competently and in a most delightful manner. We can thoroughly recommend it to all lovers of ships and lovers of Devon. It is a very worthy member of a notable series of books.

Ships and Ship Models Mailboat

● **Letters of general interest on maritime matters are welcomed. A nom-de-plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents**

A 75-YEAR OLD PADDLE STEAMER

Many of our readers who regretted the end of P.S. *Victoria*, the old paddle steamer owned by Messrs. Cosens of Weymouth, may be glad to know that her great little sister ship, P.S. *Empress* is still in service in 1954, her 75th year. She too has oscillating engines.

Bristol. " STUDENT "

ITALIAN MODEL YACHTS

In your May issue you were kind enough to publish the photos I sent you showing the two M class yacht hulls I had built from the Daniels design.

I think it might interest you to see the photo attached which shows one of these yachts (the lightest and fastest) which is in process of crossing Lake Como on the way to Onno Mandello.

In the same district this year there will be a regatta for the Italian Championships of classes F and M. I intend to take part in them.

With best wishes.

Milan SILVIO ROTA

DRAWINGS OF MODERN WARSHIPS

In your May issue, Mr. Norman Ough reveals the financial hazards involved in the preparation of his magnificent drawings of modern warships. It is disquieting to know that if, and when, their author's private resources come to an end, the work itself must cease.

As a professional designer with experience of model-making and research, I do not know of any other drawings which, in their abundance of accurate detail, suggest such clear artistic knowledge. Most engineering drawings are without this quality, and it is Mr. Ough's triumph to have given us fact and art in equal measure. There can be no question either of the unique opportunity offered by these drawings to the practical model-maker, or of their fascination for historian and connoisseur alike.

May I conclude by praising the public service that you perform by publishing this work, and by asking, like Oliver Twist, for more!

London, S.W.7. LAURENCE KEEBLE

PLANS OF OLD IRONCLADS

I have just received the April number of your much-appreciated magazine, and hasten to write to second the views of Mr. Fano, as being equally interested in the period which intrigues him,—on the other hand, I find the research involved is half the fun of model-making. Mr. Fano may not be aware that the Admiralty, besides providing special model-makers' plans for more recent naval vessels, will also supply photostatic prints of the original plans of earlier ships, as well as excellent postcard size photographs where available. These photostats come rather expensive, about a guinea a set, but I have had one of the cruiser *Good Hope* and found the set of absorbing interest.

For the German ships which Mr. Fano mentions, there is a German publication which may still be available through those firms which specialise in Continental publications, called " Die Deutschen Kriegsschiffe 1815-1936 " by Erich Gröner, originally published by Lehmans Verlag, Munchen, I think in 1937. It has plans of such ships as the *Baden*, Germany's response to our *Queen Elizabeth* battleship class.

I agree whole-heartedly with the necessity for photographs and drawings showing deck details and lay-outs, as I too find that it is here that the greatest difficulty arises. MODEL SHIPS AND POWER

BOATS did publish one or two descriptions, e.g., the *Majestic*, which are of great use, and I too hope that you will follow up Mr. Fano's suggestion with more in the future.

Your South African readers may not be aware that we formed an autonomous section of the World Ship Society out here over a year ago and it is now flourishing, with lectures, visits to ships, etc.

Cape Town, S.A. J. E. GALLIE

LANCEWOOD

With regard to Mr. R. J. Collins' letter on lancewood appearing in the May issue, I should like to point out that W. I. Brine & Son do not supply lancewood (Oxandra Lanceolata) but Degame (Calycophyllum Candidissimum).

These two timbers are often confused as they both come from the same part of the world and have some characteristics in common, nevertheless Degame is *not* lancewood.

Barton-on-Sea. DONALD MCNARRY

MORE HELP WANTED

In reading the very excellent last issue of SHIPS AND SHIP MODELS I came across a letter in the "Mailboat" column by Mr. R. Alexander, titled Help Wanted. I am in a situation now where I need help of the same general sort.

I wish to build two ships to a miniature scale which have long been favourites of mine. I have searched for two years for plans of these ships to no avail. I have written the steamship companies, and everyone I knew of who I thought might help me. So far I have had no luck. The first ship is one of the T. & J. Harrison line. The pre-World War II class with the very high funnels of which the *Planter* and *Tactician* were members. The other is a Blue Funneler of the class including the *Rhexenor* and *Adrastus*, pre-war with the high funnel also. I want to include as much detail as I can on the models and be as accurate as possible. I would greatly appreciate any help anyone could give me on this, and would of course pay any charges involved.

Maybe some day I will find plans of these ships. I am in hopes that someone will read this who knows where I can get them.

Thank you very much for your kindness ; the magazine is wonderful, I would, of course, like to see more of ship recognition and miniature model building but the entire book interests me.

New Orleans, La., U.S.A. JOSEPH WILHELM

OLD PADDLE STEAMERS AND THEIR ENGINES

As a present subscriber to your very interesting publication, THE MODEL ENGINEER, and as one who has been acquainted with it with certain lapses since about 1908, I am fully aware of the interest taken by the model engineering fraternity in the older types of steam engine and their desire to make models of suitable specimens.

While I can lay no claim to amateur status, being a professional engineer, I am nevertheless very interested in model making though unable at the moment to engage actively in it.

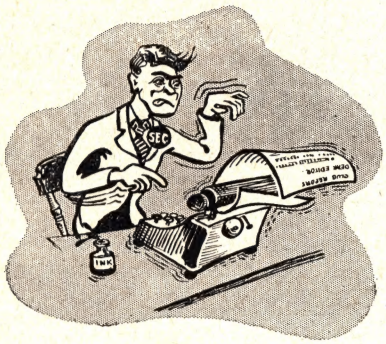
It has occurred to me however, since taking up my present appointment last year as Superintendent Engineer to the River Dart Steamboat Company Ltd., of this town, that some of our fleet would be of great interest to the steamer enthusiasts. I refer to our paddle steamers which date in one case from 1914, with another carrying an engine from a previous vessel and going back to the early 1900s.

The vessels are fitted with inclined compound engines 12 in. and 24 in. bore by 24 in. stroke approximately and are good examples of the period. I am quite sure that my company would agree to allow interested parties to inspect them by arrangement, and to allow me to provide any information which might be of interest to such parties.

Dartmouth, Devon. N. F. SCARBOROUGH, A.M.I.MECH.E.

HONOUR FOR A SHIP MODEL

Many of our readers will remember the model of H.M.S. Magpie which was presented to H.R.H. The Duke of Edinburgh when he opened the M.E. Exhibition in 1952. When we went over the Royal Yacht Britannia, the day following her return to London, we were gratified to see the model occupying a prominent position in the Duke's private sitting room. A recess has been built into the partition at the end of the room and the model and its baseboard, after removing the case, has been inserted into it. The recess is illuminated from above by concealed lamps and even in daylight the model seems to dominate the room. The model was built for Percival Marshall and Co., by a team of experts, many of whom had won cups or medals for ship models in previous M.E. Exhibitions, and the collaboration proved very successful. We consider it a great compliment that the model has been housed in such a prominent and appropriate position.



news from the clubs

MODEL YACHTING ASSOCIATION

The following Open Fixtures have been arranged:—

	"A" Class	
July 3rd	Birmingham	Plant Cup.
,, 4th	Surbiton	Glenham Cup.
,, 5, 6 & 7th	Fleetwood	North District Championship.
,, 8, 9 & 10th	Fleetwood	Mayoral Cup.
,, 18th	Birkenhead	Parks Committee Cup.
,, 25th	Surbiton	Jubilee Cup.
Aug. 1st & 2nd	Fleetwood	*Daily Dispatch* Trophy.
,, 2nd	Gosport	Yacht Masters' Cup.
	10 Raters	
July 18th	Forest Gate	President's Cup.
,, 25th	Forest Gate	Caius Bliss Cup.
	"M" Class	
July 11th	Hove	Met. and S. District Championship.
,, 25th	Morcambe	Sandilands Trophy.
,, 31st	Fleetwood	*Daily Dispatch* Trophy.
	6 Metre	
July 17th	Birmingham	Gilbert Cup.

Hon. Secretary: M. FAIRBROTHER, 1221, Pershore Road, Stirchley, Birmingham 30.

THE MODEL POWER BOAT ASSOCIATION

The following events take place during July:—

July 4th. Wicksteed M.Y. & P.B.C. Regatta at Wicksteed Park, Kettering.

July 4th. Bromley M.P.C. Regatta for free running boats, radio-controlled boats and D. Class at Whitehall Recreation Ground, Bromley, Kent.

July 11th. Southend M.P.B.C. Regatta at Southchurch Park, Southend-on-Sea.

July 18th. S. London M.E.S. Regatta at Brockwell Park, London, S.W.

July 25th. Victoria M.S.C. Regatta at Victoria Park, Hackney, E.9.

Hon. Secretary: J. H. BENSON, 25, St. Johns Road, Sidcup, Kent.

INTERNATIONAL RADIO CONTROLLED MODELS SOCIETY

The International Radio Controlled Models Society announces that its Annual International Contests for Radio Controlled Models will be held in Birmingham, on July 10th and 11th, 1954.

The Contests for Radio Controlled Model Boats will be held on Saturday, July 10th and Contests for Radio Controlled Model Aircraft on Sunday, July 11th.

It is anticipated that a large number of competitors, both from Great Britain and from overseas, will take part in these contests.

Further details and entrance forms are available and will be sent on application to Hon. Contest Publicity Secretary: H. CROUCHER, 27, St. Johns Road, Sparkhill, Birmingham 11. Entry fee up to July 9th is 5s. 6d. and after that date 7s. 6d.

Y.M. 6-m. O.A. AND SOUTH LONDON M.Y.C.

Forthcoming events:—

Date	Class	Events	Start
July 4th	"A"	Glenham Cup (Open)	10.30
,, 10th	36 in.	Club Race	2.30
,, 17th	"M"	Club Race	2.30
,, 25th	"A"	Jubilee Cup (Open)	10.30

Sailing Water: The Rick Pond, Home Park, Hampton Court.

Further particulars from: N. D. Hatfield, 132, Westbourne Grove, Westcliff-on-Sea, Essex.

HOVE AND BRIGHTON MODEL YACHT CLUB

The forthcoming events are as follows:—

Date	Event	Class
July 4th	Second Club Championship Race	36 in.
,, 11th	Metropolitan and Southern District Championship	"M"
,, 18th	Club Racing	"M"
,, 25th	Juniors (Morning only)	36 in.
,, ,,	(Afternoon) Thames Shiplovers' Society Regatta for sailing ship models all types.	
Aug. 1st	Third Club Championship Race	10-R.

Further information may be obtained from the Hon. General Secretary: F. JENNINGS, c/o, Ardingly College, Haywards Heath, Sussex.

WORLD SHIP SOCIETY LONDON & HOME COUNTIES BRANCH

The next meeting of this branch will be held on Wednesday, July 7th, at 7.15 p.m. at the "Two Brewers," Shoe Lane, London, E.C.3.

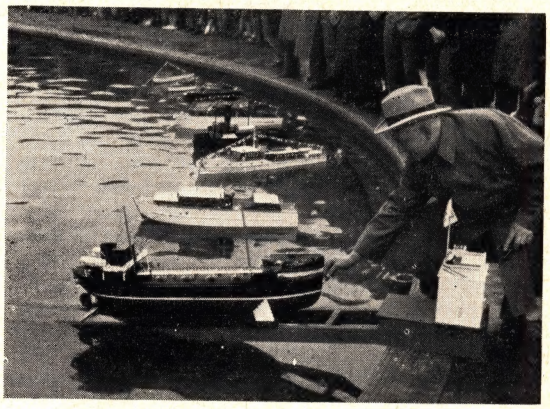
Subject—General Discussion of Shipping News and Branch Plans. Members and shipping fans are welcome.

Branch Secretary: J. R. DANIELL, 51, Little Marlow Road, Marlow, Bucks.

THE BRISTOL SHIP MODEL CLUB

At the British Legion Headquarters, Portland Square at 7 p.m. on July 13th, there will be a talk on "The Liberty Boat." This is the last meeting until the autumn, and a good attendance is requested.

Further details from the Hon. Secretary: A. RALLS, 8, Kenmore Crescent, Filton, Bristol.



HARROW & WEMBLEY SOCIETY OF MODEL ENGINEERS

The model tanker which was built jointly by the members of the above Society, as announced in our Clubs page in the May issue, was duly launched with full ceremony on Sunday morning May 23rd. The launching was performed by Lt. Cdr. J. H. Craine (Jason) who broke the tiny champagne bottle on her bows and proclaimed her name "Club Spirit." Our photograph shows him breaking the bottle after which she slid gracefully down the ways and into the water. Shortly after, steam was raised and she sailed away on "her lawful occasions." The remainder of the club's fleet was dressed in honour of the occasion.

WOOD GREEN & DIST. MODEL POWER BOAT CLUB

Home Waters: White Hart Lane Recreation Ground.

After a winter in dry-dock, now that the repairs to the pond have been completed, we are once again able to operate, and accordingly extend a hearty welcome to any who may like to join us, and a cordial invitation to friends who may care to visit us. We are to be found round the pondside each Sunday morning. Those wishing further particulars should write to: Hon. Secretary A. F. MILES, 5, Courcy Road, Hornsey, N.8.

THE BRITANNIA SHIP LOVERS ASSOCIATION

The above Ship Lovers Association is shortly to be opened to all who are interested in warships, merchant ships and yachts and ship models, to arrange visits to docks, ships where possible, and places of nautical interest. Those are briefly the aims and objects of the association. Both ladies and gentlemen can apply for membership to: HAROLD T. SHERRIFF, 87, Springfield Road, Brighton, 6, Sussex.

SUSSEX SHIP LOVERS SOCIETY

For the last three years, the Sussex Ship Lovers Society has held monthly meetings at which talks have been given on various aspects of shipping operation and management. A comprehensive series of ship visits has been carried out, vessels visited ranging from large liners to small coasters. Meetings are held at 8.00 p.m. on the last Wednesday in each month at Cook's Hotel, Old Steine, Brighton, 1, and prospective members will be welcome. Further particulars can be obtained from the secretary: J. M. BUTTIMER, 9a, Beaconsfield Villas, Brighton, 6, Sussex.

"SHIPS AND SHIP MODELS"

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Use of Box No. **1s.** *extra.* *Minimum* 12 *words*

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PLYWOOD, HARDBOARD, block board, etc. In all thicknesses. Veneered if required oak, mahogany and walnut. List 1½d. stamp.—SPIERS, 330, Hackney Road, London, E.2. Phone: SHOreditch 8791-2-3.

WARSHIP DRAWINGS now available from Norman A. Ough, 98, Charing Cross Road, London, W.C.2. Scale 1″ = 16′ (detail 1″ = 8′). Destroyers, "V" class H.M.S. "Vega," (1916-45), 12s. 6d. "D" class H.M.S. "Daring" (1934), £1. "Tribal" class H.M.S. "Matabele," (1936), £1. Cruisers, H.M.S. "Dido" (1939 to date), £1. "Lines" of "Dido," 10s. Carlisle class cruiser, H.M.S. "Curacoa," (1916-42), £1. Battle class destroyer H.M.S. "Cadiz" £1. Cruiser "Sheffield" (as in 1954), £1.

3′ 6″ MODEL YACHT, unrigged, £5. Excellent condition—HENDERSON, 111, Thurlow Park Road, S.E.21.

MORRIS 10 H.P. ENGINE, Wortham Blake conversion, complete with gearbox, mag., carb., pump, exhaust and 1 in. shaft coupling, £25.—HERMAN, Colway Cross, Bishopsteignton, S. Devon.

CABIN CRUISER FOR SALE. 3′ "Marlin," water-cooled, E.D. 2.46. Fitted complete radio with proportional control. Whole unused with fitted box. Many expensive fittings. Offers to—BARTHOLOMEW, 62, Berkeley Court, London, N.W.1.

£6 COMPLETE RADIO CONTROL SET FOR SALE including E.D. transmitter, E.D. Mk II receiver. Clockwork three position rudder, actuator and galvanometer. First class working order. Apply—W. MILLER, 16, Upper Berkeley Street, W.1.

YACHT, £65 o.n.o., 15 ft. × 5 ft., Bermudan rig, half decked, centre board, bargain, all gear; ideal for beginner.—PAYS, 7, Fairhaven Avenue Shirley, Croydon.

RADIO-CONTROL OF MODELS BY TELE COMMANDER TRANSMITTER and receiver complete, £4 3s. 2d. each. S.A.E. for bargains list, books.—LAWRENCE, 134, Cranley Gardens, N.10. CLI 6641.

HOUSEBOAT, 32′ × 10′, comfortable completely furnished home: engine needs attention. Moored near Hampton Court, £475 or terms. Write—K. M. MARTIN, "Puffin," Ash Island, East Molesey, Surrey.

FOR SALE. Bristol Channel pilot cutter, 43 ft. × 12 × 7, sails, Ford V8 engine, sleeps six. Seen South Coast £550.—Box No. 134, SHIPS AND SHIP MODELS Offices.

WANTED. Sea cabin cruiser, 24′ upwards. Photo. and full particulars.—W. H. STARKEY, 19, Sykes Street, Castleford, Yorkshire.

DINGHY 14′, clinker built, mooring and new camping covers, fully equipped, with 4 h.p. "Seagull" engine, clutch model, £90 complete or would separate.—PURVIS, 39, Tangier Lane, Eton, Bucks.

16′ MORGAN GILES TEIGN CORINTHIAN, half-decker, main, two foresails, spinnaker, hollow mast, flat boom, very fast, lively, well maintained and fully equipped canvas cover, and trailer, £175.—LOGAN, 68, Church Street, Birmingham, 3. Central 7556.

SHIPS IN BOTTLES, sail or steam.—D. BARKER, 46, Grove Lane, Hale, Altrincham, Cheshire.

COMPLETE SET BUILDING PLANS, cedar hull block, for building on plated hull principle of "Pacific Reliance," scale ⅛″ to 1′. Overall length 5′ 2¼″, beam 8″, eight photographs of actual ship and copy Craines "Ship Modelling Hints and Tips," £4 10s., buyer collects. Pair Zeiss 7 × 50 Binoculars, coated lens, width 7¾″, height 7″, insured to April, 1955, perfect and unmarked, case, £37.—W. BROGAN, 4, Mount Pleasant Road, Hastings.

H.M.S. "BOUNTY." Complete kit, including hull cut to shape, fittings, etc. Detailed instructions and plan of sails, spars, hull and deck structures. Scale 5/32″ = 1′, £8 or nearest offer. "Cutty Sark," complete kit, including hull cut to shape, fittings, etc., detailed instructions, sail and spar plan, hull plan and deck structures. Scale 3/32″ = 1′ £8 or nearest offer.—PORTER, 44, Dysart Avenue, Kingston-on-Thames, Surrey.

10 RATER MODEL YACHT, vane steering, steel mast, cedar planked, four suits sails, main new; also spinnaker Steinberger design, mint condition, £18.—C. GARLICK, 16, Lupton Street, London, N.W.5.

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ONLY 12 DAYS LEFT

Have you sent in your entry form for the national competitions at The Model Engineer Exhibition? Entries close on July 12th for what promises to be the most spectacular and popular exhibition yet organised by "The Model Engineer."

The Model Engineer

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AUGUST 18-28, 1954

Marine Classes

D, Steam and Motor Ships of any period (non working); *E*, Working steamers (power driven prototype vessels); *F*, Sailing Ships of any period (non working); *G*, Working Yachts and Sailing Ships; *H*, Hydroplanes and Speedboats; *I*, Miniatures.

POST THIS TODAY

To: The Exhibition Manager, Percival Marshall & Co. Ltd., 19-20, Noel Street, London, W.1.

Please send me full details of the Model Engineer Exhibition Competitions, together with entry form

Name .....

Address .....

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BOOKS FOR ALL NAUTICAL ENTHUSIASTS

Some suggestions from our Maritime List

830. THE WHEEL'S KICK AND THE WIND'S SONG *by Captain A. G. Course.* A piece of real sea history written by one of the participants. Live with the author again through the hazards of days under sail, when it required courage and the love of sail to go to sea. 24 illustrations. 278 pp. "*. . . made me feel much refreshed and the better for reading it.*" Gilbert Harding in a B.B.C. broadcast. **18s. 0d.** net.

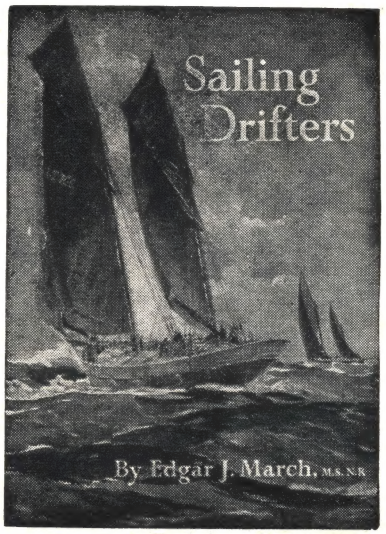
862. BUILD YOURSELF A MODEL YACHT *by W. J. Daniels and H. B. Tucker.* Here are two designs by men famous in the model yachting world, together with complete working instructions and full-size construction plans for a 30 in. Sharpie and 36 in. restricted yacht—guaranteed to sail ! Materials for the Sharpie cost under £3, for the larger boat under £6. Tools required can be found in the family tool chest. 21 helpful diagrams. 104 pp. Expert advice on sailing of model yachts. **12s. 6d.** net.

335. MODEL STEAMERS AND MOTOR BOATS *Edited by Percival Marshall, C.I.Mech.E.* A handbook on model steamers and petrol motor boats. Describes in detail—with constructional drawings, plans, etc.—river launches, paddle boats, liners, warships and speed boats in such clear, easy-to-follow way that successful construction and sailing follow ! 128 pp. **3s. 6d.** net.

858. FAMOUS PADDLE STEAMERS *by F. C. Hambledon.* History, construction and plans of some of the best-known paddle steamers plying the Thames, South Coast and cross-channel routes. 104 pages of informative text, frontispiece and over 80 specially-prepared line drawings—mechanisms, details, profiles—help the model maker to construct fully authentic working models or small waterline models. Special sheer plan of *The Royal Eagle.* 104 pp. **8s. 6d.** net.

857. SAILING TRAWLERS *by Edgar J. March.* Captures for all time a vanished age of sail—the life afloat, the seamanship, the methods of working, the construction and rigs of that vast fleet of sailing trawlers which once worked out from the East Coast ports. Fully describes hull construction, sail-making, various rigs, etc., with some 181 magnificent photographs—some nearly a century old—and a complete set of drawings of every detail of the Lowestoft trawler, *The Master Hand.* 498 pp. **63s. 0d.** net.

825. THE TEA CLIPPERS *by D. R. MacGregor.* With a wealth of detail, the design and construction of the famous fast-sailing ships which were built expressly to race tea from China to the London market are described and superbly illustrated. A collection of folding plans, vivid drawings by the author in the text and over 40 reproductions from famous paintings and early photographs. 7 plates give lines of 6 particular ships; also spar dimensions and rules for tonnage measurement. Comprehensive index; bibliography. 194 pp. **25s. 0d.** net.



855. SAILING DRIFTERS *by Edgar J. March.* Huge fleets of sailing drifters once worked out of Yarmouth and Lowestoft, and around the coasts of England, Scotland and the Isle of Man. The history of herring lugger, mackerel driver, scaffie, fifie, zulu, nickey and nobby is told with a wealth of detail never before available. Here is no conjectural story, but actual facts recounted to the author by the fishermen themselves, who knew the life 60 and more years ago. The construction and rig of these picturesque craft, built to suit the waters in which they fished, is illustrated with 60 pages of scale plans, many by the author, and 76 sketches of gear. 191 superb photographs portray a way of life now gone for ever. 365 pp. **63s. 0d.**

863. MASTER IN SAIL *by Captain J. S. Learmont.* Currently being serialised in SHIPS AND SHIP MODELS, the second revised edition of this outstanding book is now available. All readers will want this record of Captain Learmont's reminiscences in permanent form. Going to sea before he was 12 years old, the author by dint of hard work became at 24 the master of a barque bound out around Cape Horn. Advantage has been taken of the reprinting to add to, and revise the text. Map end papers. 16 illustrations. 242 pages. "*. . . it is a book which may well be studied with advantage by young apprentices. In it is revealed the philosophy of a master who was years ahead of his time in his methods of handling both ships and personnel.*"—*The Journal of Shipping and Commerce.* **12s. 6d.**

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